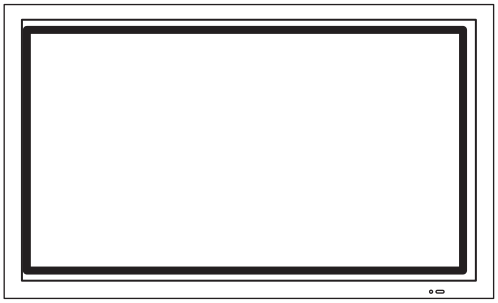
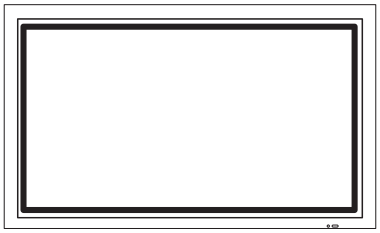
HITACHI

SERVICE MANUAL

SM005

32PD5000/5100/5200/5300
42PD5000/5100/5200/5300
37PD5200 42PMA500E
55PMA550E 55PD5200





Caution

Be sure to read this manual before servicing. To assure safety from fire, electric shock, injury, harmful radiation and materials, various measures are provided in this HITACHI Plasma display.
Be sure to read cautionary items described in the manual to maintain safety before servicing.

Service Warning

1. Since Panel Module and Front Filter are made of glass, handling the broken Module and Filter shall be taken care sufficiently in order not to be injured.
2. Replacing work shall be started after the Panel Module and the AC/DC Power Supply become sufficiently cool.
3. Special care shall be taken to the display area in order not to damage its surface.
4. The Panel Module shall not be touched with bare hand to protect its surface from stains.
5. It is recommended to use clean soft gloves during the replacing work in order to protect not only the display area of the Panel Module but also a serviceman himself.
6. The Chip Tube of Panel Module (located upper left of the back and surrounded by frame) and flexible cables connecting Panel glasses to drive circuit PWBs are very weak, so shall be taken care sufficiently not to break. If you break Chip Tube, the Panel doesn't display anything forever.

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SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.

Plasma Display

October 2003 Digital Media Division

CAUTION FOR SAFETY

Please read this page before repair the monitor.
This page explains to following items for keep the safety of set and prevent to accident during repair work.

- **We explain by symbol at happen the damage or injury when took wrong repair.**

⚠ **Warning**	This symbol means **"possible to die or heavy damage"**
⚠ **Caution**	This symbol means **"possible to damage or something will break"**

- **We made the symbol as below, which are kind of following items.**

⚠	This symbol means **"CAUTION"**	❗	This symbol means **"MUST"**
⚡	This symbol means **"POSSIBLE to ELECTRIC SHOCK"**	⊘	This symbol means **"DO NOT"**

⚠WARNING

■ Should be follows to instructions.

⚠ We indicates to cabinet, chassis and parts by label, which are special attention part. Please follow to note and [Safety Instructions] of User's Manual.

■ Prevent the electric shock.

⚡ Please take care during working because monitor has high voltage part and power supply part.

Possible to die if you tough to these place by miss take.

Please disconnect power plug during overhaul, reassemble or change parts.

You will die or take damage by electric shock if you touch to live part.

■ Use recommended components.

❗ Please use to same characteristic component, which is same as previous for your safety and keep reliability especially marked by ⚠ in parts list and circuit diagram.

It is reason of electric shock or fire if you use non-recommended component.

■ Should be kept same style of wiring or component.

❗ Monitor uses tubes or tapes, which made by insulator, and some components are keep distance from surface of PWB for safety.

Internal leads kept from hot part or high voltage part by clamper or styling, so please return to original condition for prevent to electric shock or fire.

■ Should be done safety check after finished.

❗ Every part (removed screws, component and wiring) should be returned to previous condition.

Check around repair position for make damage by miss take and measure the insulated impedance by meg-ohm meter.

Confirm the value of impedance, that value is more than 4M ohm.

It is reason for electric shock or fire if that value is less than 4M ohm.

■ Nobody can check and repair to the code and combination circuit of HDCP.

⊘ Never remove the shield case, which is assembled to the code and combination circuit of HDCP.

PRECAUTIONS

● How to clean the plasma screen panel of the monitor

Before cleaning the monitor, turn off the monitor and disconnect the power plug from the power outlet.

To prevent scratching or damaging the plasma screen face, do not knock or rub the surface with sharp or hard objects. Clean the screen with a soft cloth moistened with warm water and dry with a soft cloth. If it is not enough, then use a cloth with mild detergent. Do not use harsh or abrasive cleaners.

● How to clean the cabinet of the monitor

Use a soft cloth to clean the cabinet and control panel of the monitor. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth.

Never use acid/alkaline detergent, alcoholic detergent, abrasive cleaner, powder soap, OA cleaner, car wax, glass cleaner, etc. especially because they would cause discoloration, scratches or cracks.

1. Features

PW1 chassis

This chassis basically constitutes just a MONITOR to use with AVC (Audio Visual Control center). But it can constitute AV MONITOR when applied the VIDEO board, and also a TV when applied the VIDEO board and the TUNER board.

[Common Features]

● Large-screen, high-definition plasma display panel

The 42-inch color plasma display panel, with a resolution of 1024 (H) x 1024(V) pixels, and the 32-inch color plasma display panel with a resolution of 852(H) X 1024(V) pixels, creates a high-definition, large-screen (aspect ratio : 16:9) and low-profile flat display. Free from electromagnetic interferences from geomagnetic sources and ambient power lines, the panel produces high-quality display images free from color misconvergence and display distortion.

● High Performance Digital Processor

A wide range of personal computer signals can be handled, from 640 x 400, 640 x 480 VGA to 1600 x 1200 UXGA.

● Easy-to-use remote control and on screen display system

The remote control included eases the work of setting display controls. Further, the on-screen display system, displays the status of signal reception and display control settings in an easy-to-view fashion.

● Power saving system

The International ENERGY STAR® power saver feature saves power consumption automatically when input signals are not available.

When connected to a VESA DPMS-compliant PC, the monitor cuts its power consumption while it is idle.

● TruBass

TruBass, SRS and (●)® symbol are trademarks of SRS Labs,Inc.

TruBass technology is incorporated under license from SRS Labs, Inc.

[AVC MONITOR model] 42/32PD5000

- DVI-D terminal and 8pin-DIN terminal for AVC input
  (Other terminals, buttons and remote control for use are all with the AVC unit.)

[AV MONITOR model] 42PD5100

- One mini D-sub terminal and one DVI-D terminal for RGB input
  The D-sub terminal can also receive the RGB-component by On-Screen Display control.
- One composite/S.video input terminal and two component video input terminals added with VIDEO board
  One component input is possible to switch to RGB signal input from the Menu screen.
- One SCART terminal for the signal of the European standard added with VIDEO board
  It operates as composite/S.video input and RGB input terminal, or composite video output terminal.
- One composite video output terminal as a monitoring output added with VIDEO board
- Simple type of the remote control

[TV model] 42/37/32PD5200

- Various input/output terminals added with VIDEO board - same to above-mentioned feature of the AV MONITOR model
- Tuner and TELETEXT receiver added with TUNER board
- High performance type of the remote control

PRECAUTIONS

● **How to clean the plasma screen panel of the monitor**

Before cleaning the monitor, turn off the monitor and disconnect the power plug from the power outlet.
To prevent scratching or damaging the plasma screen face, do not knock or rub the surface with sharp or hard objects. Clean the screen with a soft cloth moistened with warm water and dry with a soft cloth. If it is not enough, then use a cloth with mild detergent. Do not use harsh or abrasive cleaners.

● **How to clean the cabinet of the monitor**

Use a soft cloth to clean the cabinet and control panel of the monitor. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth.
Never use acid/alkaline detergent, alcoholic detergent, abrasive cleaner, powder soap, OA cleaner, car wax, glass cleaner, etc. especially because they would cause discoloration, scratches or cracks.

1. Features

PW1 chassis

This chassis basically constitutes just a MONITOR to use with AVC (Audio Visual Control center). But it can constitute AV MONITOR when applied the VIDEO board, and also a TV when applied the VIDEO board and the TUNER board.

[Common Features]

● **Large-screen, high-definition plasma display panel**

The 37-inch color plasma display panel, with a resolution of 1024 (H) x 1024(V) pixels, creates a high-definition, large-screen (aspect ratio : 16:9) and low-profile flat display. Free from electromagnetic interferences from geomagnetic sources and ambient power lines, the panel produces high-quality display images free from color misconvergence and display distortion.

● **High Performance Digital Processor**

A wide range of personal computer signals can be handled, from 640 x 400, 640 x 480 VGA to 1600 x 1200 UXGA.
(RGB analog input)

● **Easy-to-use remote control and on screen display system**

The remote control included eases the work of setting display controls. Further, the on-screen display system, displays the status of signal reception and display control settings in an easy-to-view fashion.

● **Power saving system**

The International ENERGY STAR® power saver feature saves power consumption automatically when input signals are not available.
When connected to a VESA DPMS-compliant PC, the monitor cuts its power consumption while it is idle.

● **TruBass**

TruBass, SRS and (●)® symbol are trademarks of SRS Labs,Inc.
TruBass technology is incorporated under license from SRS Labs, Inc.

[AVC MONITOR model] 37PD5000

- DVI-D terminal and 8pin-DIN terminal for AVC input
  (Other terminals, buttons and remote control for use are all with the AVC unit.)

[TV model] 37PD5200

- One mini D-sub terminal and one DVI-D terminal for RGB input.
  The D-sub terminal can also receive the RGB-component by On-Screen Display control.
- One composite/S.video input terminal and two component video input terminals added with VIDEO board.
  One component input is possible to switch to RGB signal input from the Menu screen.
- One SCART terminal for the signal of the European standard added with VIDEO board.
  It operates as composite/S.video input and RGB input terminal, or composite video output terminal.
- One composite video output terminal as a monitoring output added with VIDEO board.
- Tuner and TELETEXT receiver added with TUNER board.
- High performance type of the remote control

2. Specifications

Panel	**Display dimensions**	Approx. 32 inches (716 (H) x 399 (V) mm, diagonal 820mm)	Approx. 42 inches (922 (H) x 522 (V) mm, diagonal 1059mm)
	Resolution	852 (H) x 1024 (V) pixels	1024 (H) x 1024 (V) pixels
Net dimensions (excluding Speakers/Stand)		830 (W) x 506 (H) x 92 (D) mm	1030 (W) x 636 (H) x 91 (D) mm
Net weight (excluding Speakers/Stand)		24.6kg	34.9kg
Ambient conditions	**Temperature**	Operating : 5˚C to 35˚C, Storage : 0˚C to 40˚C	
	Relative humidity	Operating : 20% to 80%, Storage : 20% to 90% (non-condensing)	
Power supply		AC100 - 240V, 50/60Hz	
Power consumption/at standby		255W / <3W	365W / <3W
Audio output		12W + 12W (6Ω)	
(RGB input)			
Input signals	**Input terminals**	RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack)	
	Video signals	0.7 V/1.0 Vp-p, analog RGB (Recommended Signal) 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60	
	Sync signals	H/V separate, TTL level [2KΩ] H/V composite, TTL level [2KΩ] Sync on green, 0.3 Vp-p [75Ω]	
(Video input)			
Input signals	**Input terminals**	AV1: composite video input terminal (RCA) AV1: Y PB PR video input terminal (RCA) AV1: L/R audio input terminal (RCA) AV2: composite video input terminal (RCA) AV2: Y/G PB/B PR/R video input terminal (RCA) AV2: L/R audio input terminal (RCA) AV3: composite video input terminal (RCA) AV3: S video input terminal (RCA) AV3: L/R audio input terminal (RCA) AV4: composite video / S video / RGB / L/R audio input terminal (Scart)	
	Video signals	AV1: PAL, SECAM, NTSC3.58, NTSC4.43 AV1: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60 AV2: PAL, SECAM, NTSC3.58, NTSC4.43 AV2: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60, RGB AV3: PAL, SECAM, NTSC3.58, NTSC4.43 AV4: PAL, SECAM, NTSC3.58, NTSC4.43 AV4: RGB	
Video output Signal		OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) AV4: composite video / L/R audio output terminal (SCART)	
(RF input)			
Input signals	**Input terminals**	ANT : 75Ω Unbalanced	
	RF Video System	PAL B, G, H / I / D, K SECAM B, G / D, K / K1 NTSC-M	

Applicable video signals for each input terminal

Terminal	RCA/SCART				DVI		D-sub	
Signal	CVBS	S-video	Component	RGB	PC	STB	RGB	Component
AV1	○		○					
AV2	○		○	○				
AV3	○	○						
AV4	○	○		○				
RGB1					○	○		
RGB2							○	○

(○:Available)

2. Specifications

Panel	**Display dimensions**	Approx. 37 inches (814 (H) x 445 (V) mm, diagonal 930mm)
	Resolution	1024 (H) x 1024 (V) pixels
Net dimensions (excluding Speakers/Stand)		939 (W) x 573 (H) x 98 (D) mm
Net weight (excluding Speakers/Stand)		29.0kg
Ambient conditions	**Temperature**	Operating : 5°C to 35°C, Storage : 0°C to 40°C
	Relative humidity	Operating : 20% to 80%, Storage : 20% to 90% (non-condensing)
Power supply		AC100 - 240V, 50/60Hz
Power consumption/at standby		320W / <3W
Audio output		12W + 12W (6Ω)
(RGB input) - 37PD5000TE(*		
Input signals	**Input terminals**	RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack)
	Video signals	0.7 V/1.0 Vp-p, analog RGB (Recommended Signal) 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60
	Sync signals	H/V separate, TTL level [2KΩ] H/V composite, TTL level [2KΩ] Sync on green, 0.3 Vp-p [75Ω]
(Video input) - 37PD5000TE(*		
Input signals	**Input terminals**	AV1: composite video input terminal (RCA) AV1: Y PB PR video input terminal (RCA) AV1: L/R audio input terminal (RCA) AV2: composite video input terminal (RCA) AV2: Y/G PB/B PR/R video input terminal (RCA) AV2: L/R audio input terminal (RCA) AV3: composite video input terminal (RCA) AV3: S video input terminal (RCA) AV3: L/R audio input terminal (RCA) AV4: composite video / S video / RGB / L/R audio input terminal (Scart)
	Video signals	AV1: PAL, SECAM, NTSC3.58, NTSC4.43 AV1: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60 AV2: PAL, SECAM, NTSC3.58, NTSC4.43 AV2: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60, RGB AV3: PAL, SECAM, NTSC3.58, NTSC4.43 AV4: PAL, SECAM, NTSC3.58, NTSC4.43 AV4: RGB
Video output Signal		OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) AV4: composite video / L/R audio output terminal (SCART)
(RF input) - 37PD5000TE(*		
Input signals	**Input terminals**	ANT : 75Ω Unbalanced
	RF Video System	PAL B, G, H / I / D, K SECAM B, G / D, K / K1 / L, L’

*) 37PD5000TE:Refer to the Service Manual for 32/42PD3000(AV3000E).

Applicable video signals for each input terminal (37PD5000TE)

Terminal	RCA/SCART				DVI		D-sub	
Signal	CVBS	S-video	Component	RGB	PC	STB	RGB	Component
AV1	○		○					
AV2	○		○	○				
AV3	○	○						
AV4	○	○		○				
RGB1					○	○		
RGB2							○	○

(○:Available)

2. Specifications

		55PMA500E	
Panel	Display dimensions	Approx. 55 inches (1229 (H) x 691 (V) mm, diagonal 1410mm)	
	Resolution	1366 (H) x 768 (V) pixels	
Net dimensions (excluding Speakers/Stand)		1394 (W) x 857 (H) x 105 (D) mm	
Net weight (excluding Speakers/Stand)		63.5kg	
Ambient conditions	Temperature	Operating : 5°C to 35°C, Storage : 0°C to 40°C	
	Relative humidity	Operating : 20% to 80%, Storage : 20% to 90% (non-condensing)	
Power supply		AC100 - 240V, 50/60Hz	
Power consumption/at standby		530W / <3W	
Audio output		12W + 12W (6Ω), sub woofer terminal (RCA)	
(RGB input)			
Input signals	Input terminals	RGB1 DVI input terminal (DVI-D) RGB1 audio input terminal (3.5mm Stereo Mini Jack) RGB2 analog RGB input terminal (D-sub 15-pin) RGB2 audio input terminal (3.5mm Stereo Mini Jack)	
	Video signals	0.7 V/1.0 Vp-p, analog RGB (Recommended Signal) 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60	
	Sync signals	H/V composite, TTL level (2KΩ) H/V separate, TTL level (2KΩ) Sync on green, 0.3 Vp-p (75Ω)	
Recommended signal		47 modes	
(Video input)			
Input signals	Input terminals	AV1: composite video input terminal (RCA) AV1: Y PB PR video input terminal (RCA) AV1: L/R audio input terminal (RCA) AV2: composite video input terminal (RCA) AV2: Y/G PB/B PR/R video input terminal (RCA) AV2: L/R audio input terminal (RCA) AV3: composite video input terminal (RCA) AV3: S video input terminal (RCA) AV3: L/R audio input terminal (RCA) AV4: composite video / S video / RGB / L/R audio input terminal (Scart)	
	Video signals	AV1: PAL, SECAM, NTSC3.58, NTSC4.43	AV1: NTSC-M, PAL-M, PAL-N
		AV1: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60	
		AV2: PAL, SECAM, NTSC3.58, NTSC4.43	AV2: NTSC-M, PAL-M, PAL-N
		AV2: 480i, 576i, 480p, 576p, 1080i/50, 1080i/60, 720p/60, RGB	
		AV3: PAL, SECAM, NTSC3.58, NTSC4.43	AV3: NTSC-M, PAL-M, PAL-N
		AV4: PAL, SECAM, NTSC3.58, NTSC4.43	AV4: NTSC-M, PAL-M, PAL-N
		AV4: RGB	
Video output Signal		OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) AV4: composite video / L/R audio monitor-output terminal (SCART)	
Recommended signal		15 modes	13 modes

The monitor takes at least 30 minutes to attain the status of optimal picture quality.

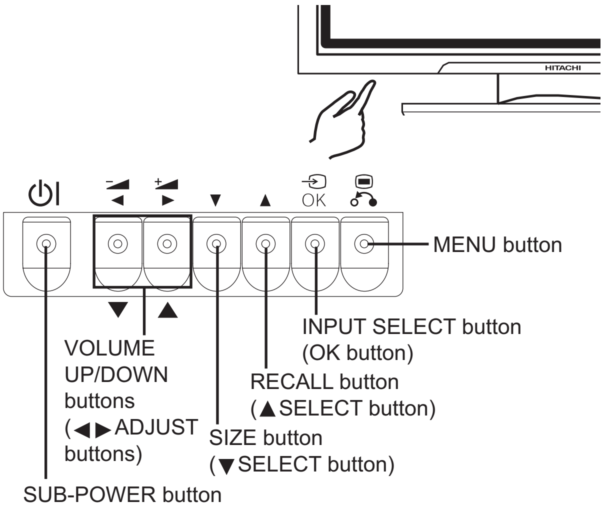
Applicable video signals for each input terminal

Terminal	RCA/SCART				DVI		D-sub	
Signal	CVBS	S-video	Component	RGB	PC	STB	RGB	Component
AV1	○		○					
AV2	○		○	○				
AV3	○	○						
AV4	○	○		○				
RGB1					○	○		
RGB2							○	○

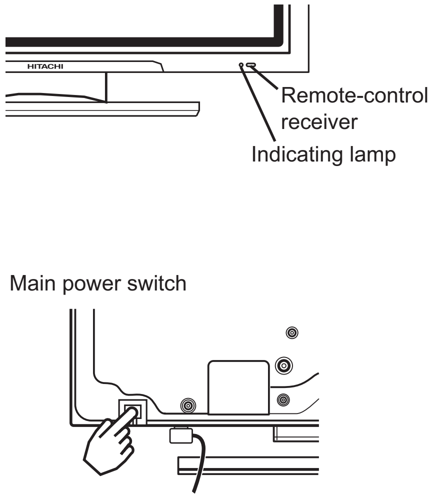
(○:Available)

Component names

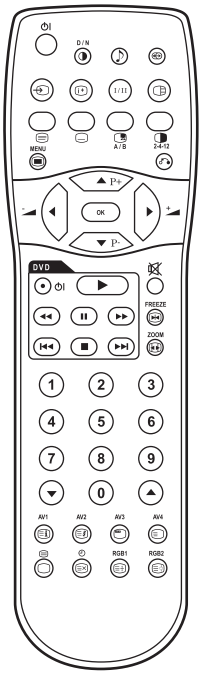
[Main unit]


HITACHI
OK
MENU button
INPUT SELECT button
(OK button)
VOLUME
UP/DOWN
buttons
(◀▶ADJUST
buttons)
RECALL button
(▲SELECT button)
SIZE button
(▼SELECT button)
SUB-POWER button

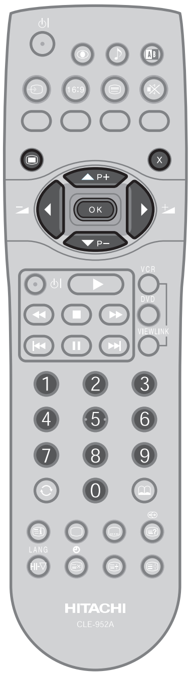
- ( ) indicates the function while the MENU is displayed on the screen.


HITACHI
Remote-control
receiver
Indicating lamp
Main power switch

[Remote control]


D / N
MENU
A / B
2-4-12
P+
OK
P-
DVD
FREEZE
ZOOM
1
2
3
4
5
6
7
8
9
0
AV1
AV2
AV3
AV4
RGB1
RGB2

CLE-958
(for 37PD5000TE)


P+
OK
P–
VCR
DVD
1
2
3
4
5
6
7
8
9
0
LANG
HITACHI
CLE-952A

CLE-952A
(for 37PD5000VE)

----- packed with
AV3000E

3. Service points

● Lead free solder

This product uses lead free solder (unleaded) to help preserve the environment. Please read these instructions before attempting any soldering work.

Caution: Always wear safety glasses to prevent fumes or molten solder from getting into the eyes. Lead free solder can splatter at high temperatures (600˚C).

■ Lead free solder indicator

Printed circuit boards using lead free solder are engraved with an "F."

■ Properties of lead free solder

The melting point of lead free solder is 40-50˚C higher than leaded solder.

■ Servicing solder

Solder with an alloy composition of Sn-3.0Ag-0.5Cu or Sn-0.7Cu is recommended.

Although servicing with leaded solder is possible, there are a few precautions that have to be taken. (Not taking these precautions may cause the solder to not harden properly, and lead to consequent malfunctions.)

Precautions when using leaded solder

- Remove all lead free solder from soldered joints when replacing components.
- If leaded solder should be added to existing lead free joints, mix in the leaded solder thoroughly after the lead free solder has been completely melted (do not apply the soldering iron without solder).

■ Servicing soldering iron

A soldering iron with a temperature setting capability (temperature control function) is recommended.

The melting point of lead free solder is higher than leaded solder. Use a soldering iron that maintains a high stable temperature (large heat capacity), and that allows temperature adjustment according to the part being serviced, to avoid poor servicing performance.

Recommended soldering iron:

- Soldering iron with temperature control function (temperature range: 320-450˚C)

Recommended temperature range per part:

Part	Soldering iron temperature
Mounting (chips) on mounted PCB	320˚C±30˚C
Mounting (chips) on empty PCB	380˚C±30˚C
Chassis, metallic shield, etc.	420˚C±30˚C

The PWB assembly which has used lead free solder

① FILTER PWB, SW PWB, LED/RECEIVER PWB, TACT SW PWB, SP TERMINAL(L/R) PWB
② AUDIO PWB, JOINT PWB
③ VIDEO PWB (42PD5000MA, 32/42PD5000TA)
④ TUNER PWB (32/42PD5000TA/55PD5200)

4. Difference table

● PWB Ass'y

PWB Ass'y	Model Symbol No. of Electric Components	32/42PD5000 TA	32/42PD5000 MA	32/42PD5000 VA
MAIN SW, FILTER, TACT SW, SP.TERMINAL(L/R), LED/RECEIVER board	x9xx, xMxx, x48x, x0xx	O	O	O
AUDIO board	x4xx	O	O	O
JOINT board	xFxx, xHxx	O	O	O
VIDEO board	x2xx, x3xx, x5xx, x6xx, xRxx	O	O	X
TUNER board	x1xx, xNxx, xTxx	O	X	X

(O: Applied X: Not Applied)

● Other components (32V)

MODEL NAME	32PD5000TA		32PD5000VA	
SYMBOL No.	PARTS No.	DESCRIPTION	PARTS No.	DESCRIPTION
#01SA	86994102	SCREW BT BIND HEAD 3X10	-	-
#01SB1	4525404	SCREW M3X10 T	-	-
#01SB2	4525404	SCREW M3X10 T	-	-
#02SB3	4525401	SCREW M3X8	-	-
#03SB4	4525404	SCREW M3X10 T	-	-
#04SC	4525404	SCREW M3X10 T	-	-
#05	QL23991	EXTEND LABEL VT	-	-
#11	SG35204	CARTON BOX	SG35207	CARTON BOX
A11	JP06951	PWB ASS'Y VIDEO	-	-
A22	JP06961	PWB ASS'Y TUNER-A	-	-
ETV1	2908801	CONNECTOR 8P	-	-
ETV2	EK01108	WIRE (PROCESSED) 50P	-	-
E04	EW08102	CABLE SCART-RCA (3PIN)	-	-
NVS6	2169511	NOISE FILTER ZCAT1518-0730	-	-
NVS9	2169511	NOISE FILTER ZCAT1518-0730	-	-
N01	QR58552	INSTRUCTION MANUAL (EN/CH1/CH2/JP)	-	-
U001	HL02041	REMOTE CONTROL TRANSMITTER CLE-958	-	-

● Other components (42V)

MODEL NAME	42PD5000TA		42PD5000MA		42PD5000VA	
SYMBOL No.	PARTS No.	DESCRIPTION	PARTS No.	DESCRIPTION	PARTS No.	DESCRIPTION
#01SA	86994102	SCREW BT BIND HEAD 3X10	86994102	SCREW BT BIND HEAD 3X10	-	-
#01SB1	4525404	SCREW M3X10 T	-	-	-	-
#01SB2	4525404	SCREW M3X10 T	4525404	SCREW M3X10 T	-	-
#01	SG35188	CARTON BOX	SG35473	CARTON BOX	SG35187	CARTON BOX
#02	SG35191	TRAY (CARTON BOX)	SG33131	TRAY (CARTON BOX)	SG35191	TRAY (CARTON BOX)
#02SB3	4525401	SCREW M3X8	4525401	SCREW M3X8	-	-
#03	SP08506	CUSHION TOP	SP08521	TOP CUSHION	SP08506	CUSHION TOP
#03SB4	4525404	SCREW M3X10 T	4525404	SCREW M3X10 T	-	-
#04	SP08512	CUSHION BOTTOM	SP08531	BOTTOM CUSHION	SP08512	CUSHION BOTTOM
#04SC	4525404	SCREW M3X10 T	4525404	SCREW M3X10 T	-	-
#05	QL23991	EXTEND LABEL VT	QL23992	EXTEND LABEL V	-	-
#06	-	-	SG35691	PAD PROTECTOR	-	-
#08S	SG34401	FRONT PAD	-	-	SG34401	FRONT PAD
#300	QJ01192	STAND ASS'Y	-	-	QJ01192	STAND ASS'Y
#641	-	-	-	-	4522885	SCREW 3X8 CE CP-GRIP
#790	MJ03041	BOLT M6X25 WITH WASHER	-	-	MJ03041	BOLT M6X25 WITH WASHER
A11	JP06951	PWB ASS'Y VIDEO	JP06951	PWB ASS'Y VIDEO	-	-
A22	JP06961	PWB ASS'Y TUNER-A	-	-	-	-
ETV1	2908801	CONNECTOR 8P	-	-	-	-
ETV2	EK01108	WIRE (PROCESSED) 50P	-	-	-	-
E02	EV01691	CORD POWER SUPPLY	-	-	EV01691	CORD POWER SUPPLY
E04	EY01951	ADAPTOR RCA-SCART CONVERSION	EY01951	ADAPTOR RCA-SCART CONVERSION	-	-
N01	QR58551	INSTRUCTION MANUAL (EN/CH1/CH2/JP)	QR58552	INSTRUCTION MANUAL (EN/CH1/CH2/JP)	-	-
SPU	GM01262	SPEAKER UNIT ASS'Y DARK SILVER	-	-	GM01262	SPEAKER UNIT ASS'Y DARK SILVER
U001	HL02041	REMOTE CONTROL TRANSMITTER CLE-958	HL01904	REMOTE CONTROL TRANSMITTER CP-RD4S	-	-

5. New adoption technology

[System control micom I001(M3062)]

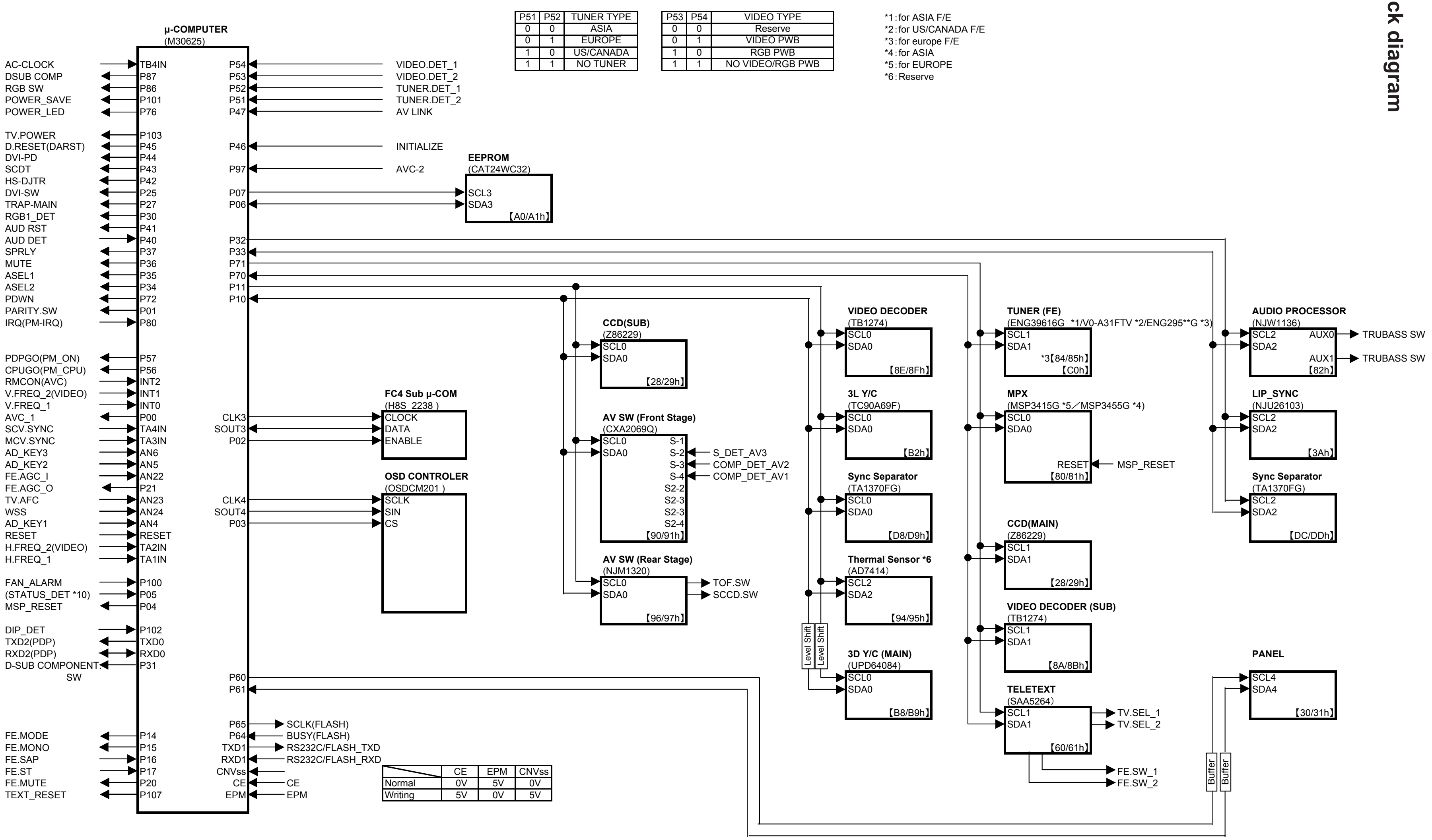
- **Pin function table**

No.	Pin Name	I/O	Function
1	OSD_DATA	O	OSD DATA
2	OSD_CLK	O	OSD CLOCK
3	AC-CLOCK	I	AC CLOCK
4	FE.AGC_O	O	AGC Voltage (F/E)
5	DATA_OUT(FC)	O	FC DATA
6	DATA_IN(FC)	I	FC DATA
7	CLK(FC)	O	FC CLOCK
8	BYTE	I	GND
9	CNVSS	I	CNVSS(FLASH)
10	DSUB COMP	O	SYNC-SW (AV1-4,D-sub_RGB: L, DVI,D-sub_Component: H)
11	RGBSW	O	SYNC-SW (AV1-4,D-sub_Component: L, DVI,D-sub_RGB: H)
12	$\overline{\text{RESET}}$	I	RESET
13	XOUT	O	16MHz OSC.OUT
14	VSS	I	GND
15	XIN	I	16MHz OSC.IN
16	VCC1	I	5V
17	$\overline{\text{NMI}}$	I	5V Pull-up
18	RMCON	I	IR Signal
19	V.FREQ_2	I	SYNC for V.Frequency Detection (Sub Picture)
20	V.FREQ_1	I	SYNC for V.Frequency Detection (Main Picture)
21	SCV.SYNC	I	CVBS for SYNC Detection (Sub Picture)
22	IRQ	I	PANEL MODULE Condition (L: Normal, H: Error)
23	MCV.SYNC	I	CVBS for SYNC Detection (Main Picture)
24	LED_GREEN	O	L: LED ON (PowerON/PowerSave), H: LED OFF (Standby)
25	H.FREQ_2	I	SYNC for H.Frequency Detection (Sub Picture)
26	RESERVE	-	NC
27	H.FREQ_1	I	SYNC for H.Frequency Detection (Main Picture)
28	PDWN	O	RESERVE (LVDS POWER DOWN MODE (Panel)) : Always High
29	SCL1	O	IIC-BUS CONTROL CLOCK (TUNER PWB)
30	SDA1	I/O	IIC-BUS CONTROL DATA (TUNER PWB)
31	TXD1	O	DATA (RS-232C)
32	RXD1	I	DATA (RS-232C)
33	SCLK	I	CLOCK (FLASH MEMORY Writing)
34	BUSY	O	BUSY (FLASH MEMORY Writing)
35	TXD2	O	RESERVE
36	RXD2	I	RESERVE
37	SDA4	I/O	IIC-BUS CONTROL DATA (PDP PANEL)
38	SCL4	I/O	IIC-BUS CONTROL CLOCK (PDP PANEL)
39	PDPGO	O	PANEL MODULE Start (L: STANDBY, H: ON)
40	CPUGO	O	MPU Recoverly of PANEL MODULE
41	EPM	I	EPM (FLASH MEMORY Writing)
42	VIDEO.DET_1	I	Detecting VIDEO PWB (L: 8pin_PWB, H: No PWB/VIDEO PWB)
43	VIDEO.DET_2	I	Detecting VIDEO PWB (L: 8pin_PWB/VIDEO PWB, H: No PWB)
44	TUNER.DET_1	I	Detecting TUNER PWB (L: ASIA, H: EURO/No PWB)
45	TUNER.DET_2	I	Detecting TUNER PWB (L: ASIA/EURO, H: No PWB)
46	CE	I	CE (FLASH MEMORY Writing)
47	AV LINK	I	AV LINK Scart Connector
48	INITIALIZE	I	Initializing EEPROM (L: INIT, H: Normal)
49	D.RESET	O	RESET (DVI)
50	DVI-PD	O	DVI Control (PowerOFF,PowerSave(except DVI): L, PowerON,PowerSave(DVI): H)

No.	Pin Name	I/O	Function
51	SCDT	I	RESERVE : Always High-Impedance
52	HS-DJTR	O	Jitter Control (DVI) : Always Low
53	AUD RST	O	RESET for LIPSYNC IC
54	AUD DET	I	Detecting Connection of LIPSYNC IC (L: Yes, H: No)
55	SPRLY	O	SPEAKER ON/OFF Relay Control (L: ON(MUTE-OFF), H: OFF(MUTE-ON))
56	MUTE	O	AUDIO MUTE (L: MUTE-OFF, H: MUTE-ON)
57	ASEL1	O	AUDIO Signal SW (D-sub,AVC: L, VIDEO,DVI: H)
58	ASEL2	O	AUDIO Signal SW (VIDEO,AVC: L, DVI,D-sub: H)
59	SDA2	I/O	IIC-BUS CONTROL DATA (Sync-Sep., Audio Processor etc.)
60	SCL2	O	IIC-BUS CONTROL CLOCK (Sync-Sep., Audio Processor etc.)
61	D-SUB COMP_SYNC.SW	O	SYNC-SW (D-sub_Component: H, Others: L)
62	VCC2	I	5V
63	DSUB_DET1	I	RGB1-DET
64	VSS	I	GND
65	TRAP-MAIN	O	L: TRAP OFF (1080i,720p), H: TRAP ON (576i/p,480i/p)
66	RESERVE	-	NC
67	DVI.SW	O	L: Analog, H: Digital (DVI)
68	WSS	I	STATUS(WSS) of SCART INPUT (AV4) (L: No Signal, M: 4:3, H: 16:9)
69	TV-AFC	I	AFC Voltage (F/E)
70	FE.AGC_I	I	AGC Voltage (F/E)
71	RESERVE	-	NC
72	FE.MUTE	-	NC
73	FE.ST	-	NC
74	FE..SAP	-	NC
75	FE.MONO	-	NC
76	FE.MODE	-	NC
77	RESERVE	-	NC
78	RESERVE	-	NC
79	SCL0	O	IIC-BUS CONTROL CLOCK (VIDEO PWB)
80	SDA0	I/O	IIC-BUS CONTROL DATA (VIDEO PWB)
81	SCL3	O	IIC-BUS CONTROL CLOCK (EEPROM)
82	SDA3	I/O	IIC-BUS CONTROL DATA (EEPROM)
83	MSP.STATUS	I	MPX STATUS (L: Fixed, H: Changed)
84	MSP.RESET	O	RESET (MPX)
85	OSD_CS	O	OSD CHIP SELECT
86	FC_ENABLE	O	FC ENABLE
87	PARITY.SW	O	L: FC4, H: AVC
88	AVC1	I	Detecting AVC Connection/Power (No Power or Without 24pin Cable : L, Others : H)
89	TEXT-RESET	O	RESET (T/TEXT)
90	AD_KEY3	I	AD KEY3: POWER
91	AD_KEY2	I	AD KEY2: PR UP/DWN, VOL UP/DWN, MENU
92	AD_KEY1	I	AD KEY1: INPUT
93	TV_POWER	O	POWER ON/OFF (L: STANDBY, H: ON/PowerSave)
94	DIP.DET	I	L: Normal(No DIP), H: Abnormal(Detect DIP)
95	LED_RED	O	L: LED ON (Standby/PowerSave), H: LED OFF (PowerON)
96	AVSS	I	GND
97	FAN_ALARM	I	L: Normal, H: Abnormal
98	VREF	I	5V
99	AVCC	I	5V
100	AVC2	I	Detecting AVC Connection/Power (No Power or Without 8pin Cable : L, Others : H)

● Block diagram

32PD5000/42PD5000 (PW1)



P51	P52	TUNER TYPE
0	0	ASIA
0	1	EUROPE
1	0	US/CANADA
1	1	NO TUNER

P53	P54	VIDEO TYPE
0	0	Reserve
0	1	VIDEO PWB
1	0	RGB PWB
1	1	NO VIDEO/RGB PWB

*1 : for ASIA F/E
*2 : for US/CANADA F/E
*3 : for europe F/E
*4 : for ASIA
*5 : for EUROPE
*6 : Reserve

	CE	EPM	CNVss
Normal	0V	5V	0V
Writing	5V	0V	5V

μ-COMPUTER
(M30625)
AC-CLOCK TB4IN
DSUB COMP P87
RGB SW P86
POWER_SAVE P101
POWER_LED P76
TV.POWER P103
D.RESET(DARST) P45
DVI-PD P44
SCDT P43
HS-DJTR P42
DVI-SW P25
TRAP-MAIN P27
RGB1_DET P30
AUD RST P41
AUD DET P40
SPRLY P37
MUTE P36
ASEL1 P35
ASEL2 P34
PDWN P72
PARITY.SW P01
IRQ(PM-IRQ) P80
PDPGO(PM_ON) P57
CPUGO(PM_CPU) P56
RMCON(AVC) INT2
V.FREQ_2(VIDEO) INT1
V.FREQ_1 INT0
AVC_1 P00
SCV.SYNC TA4IN
MCV.SYNC TA3IN
AD_KEY3 AN6
AD_KEY2 AN5
FE.AGC_I AN22
FE.AGC_O P21
TV.AFC AN23
WSS AN24
AD_KEY1 AN4
RESET RESET
H.FREQ_2(VIDEO) TA2IN
H.FREQ_1 TA1IN
FAN_ALARM P100
(STATUS_DET *10) P05
MSP_RESET P04
DIP_DET P102
TXD2(PDP) TXD0
RXD2(PDP) RXD0
D-SUB COMPONENT SW P31
FE.MODE P14
FE.MONO P15
FE.SAP P16
FE.ST P17
FE.MUTE P20
TEXT_RESET P107
P54 VIDEO.DET_1
P53 VIDEO.DET_2
P52 TUNER.DET_1
P51 TUNER.DET_2
P47 AV LINK
P46 INITIALIZE
P97 AVC-2
P07
P06
P32
P33
P71
P70
P11
P10
CLK3
SOUT3
P02
CLK4
SOUT4
P03
P60
P61
P65 SCLK(FLASH)
P64 BUSY(FLASH)
TXD1 RS232C/FLASH_TXD
RXD1 RS232C/FLASH_RXD
CNVss
CE CE
EPM EPM
EEPROM
(CAT24WC32)
SCL3
SDA3
【A0/A1h】
FC4 Sub μ-COM
(H8S_2238)
CLOCK
DATA
ENABLE
OSD CONTROLER
(OSDCM201)
SCLK
SIN
CS
CCD(SUB)
(Z86229)
SCL0
SDA0
【28/29h】
AV SW (Front Stage)
(CXA2069Q)
SCL0
SDA0
S-1
S-2 S_DET_AV3
S-3 COMP_DET_AV2
S-4 COMP_DET_AV1
S2-2
S2-3
S2-3
S2-4
【90/91h】
AV SW (Rear Stage)
(NJM1320)
SCL0
SDA0
【96/97h】
TOF.SW
SCCD.SW
Level Shift
Level Shift
VIDEO DECODER
(TB1274)
SCL0
SDA0
【8E/8Fh】
3L Y/C
(TC90A69F)
SCL0
SDA0
【B2h】
Sync Separator
(TA1370FG)
SCL0
SDA0
【D8/D9h】
Thermal Sensor *6
(AD7414)
SCL2
SDA2
【94/95h】
3D Y/C (MAIN)
(UPD64084)
SCL0
SDA0
【B8/B9h】
TUNER (FE)
(ENG39616G *1/V0-A31FTV *2/ENG295**G *3)
SCL1
SDA1
*3【84/85h】
【C0h】
MPX
(MSP3415G *5／MSP3455G *4)
SCL0
SDA0
RESET MSP_RESET
【80/81h】
CCD(MAIN)
(Z86229)
SCL1
SDA1
【28/29h】
VIDEO DECODER (SUB)
(TB1274)
SCL1
SDA1
【8A/8Bh】
TELETEXT
(SAA5264)
SCL1
SDA1
【60/61h】
TV.SEL_1
TV.SEL_2
FE.SW_1
FE.SW_2
AUDIO PROCESSOR
(NJW1136)
SCL2
SDA2
AUX0 TRUBASS SW
AUX1 TRUBASS SW
【82h】
LIP_SYNC
(NJU26103)
SCL2
SDA2
【3Ah】
Sync Separator
(TA1370FG)
SCL2
SDA2
【DC/DDh】
PANEL
SCL4
SDA4
【30/31h】
Buffer
Buffer

6. Adjustment

● How to get to Adjustment mode

Using the front control buttons with the set turned off (standby) can activate it.

Press the SUB-POWER(⏻|) button, INPUT SELECT(⇥) button and ▼ button at the same time, and hold for more than 5 seconds.

The set turns on in adjustment mode with OSD.

● Changing data and Selecting Adjustment code

When the set is in adjustment mode, the cursor ◀ , ▶ , ▲ , ▼ and OK buttons of the remote control or front panel may be used as the adjustment keys.

▲ , ▼ buttons are used for selecting adjustment code.

◀ , ▶ buttons are used for changing data values.

OK button is used for confirming the data.

After finishing the necessary adjustment press MENU button. Adjustment mode is released and the set returns to normal condition.

● Memory Initialize operation

NOTE: The execution of this function returns the adjustment codes to the preset values, therefore, adjustment data will be lost.

Procedure

(1) Enter Adjustment Mode.
(2) Select MEMORY INIT adjustment code (No.704) and change the data value from 0 to 1.
(3) Activate MEMORY INIT by pressing OK button for more than 3 seconds.
(4) Select No.374 and change data value from 1 to 0.
(5) Check that the receiving channel goes to AV1. Unit is set to preset values.

● Service adjustment items by I^2C-bus control (except 32/42PD5000VA(*))

○: should be adjusted
▲: should be followed previous data

ADJ. No.	Function		Maximum Value	Default		Changed Component			
	Adjustment Items	Mode		32"	42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
0	R DRIVE1 [TV/VIDEO/DSUB-COMP]	COOL	255	255	255	▲			○
1	G DRIVE1 [TV/VIDEO/DSUB-COMP]	COOL	255	255	255	▲			○
2	B DRIVE1 [TV/VIDEO/DSUB-COMP]	COOL	255	255	255	▲			○
3	R DRIVE2 [TV/VIDEO/DSUB-COMP]	NORMAL	255	255	255	▲			○
4	G DRIVE2 [TV/VIDEO/DSUB-COMP]	NORMAL	255	255	255	▲			○
5	B DRIVE2 [TV/VIDEO/DSUB-COMP]	NORMAL	255	255	255	▲			○
6	R DRIVE3 [TV/VIDEO/DSUB-COMP]	WARM	255	255	255	▲			○
7	G DRIVE3 [TV/VIDEO/DSUB-COMP]	WARM	255	255	255	▲			○
8	B DRIVE3 [TV/VIDEO/DSUB-COMP]	WARM	255	255	255	▲			○
9	R DRIVE4 [TV/VIDEO/DSUB-COMP]	BLACK & WHITE	255	255	255	▲			○
10	G DRIVE4 [TV/VIDEO/DSUB-COMP]	BLACK & WHITE	255	255	255	▲			○
11	B DRIVE4 [TV/VIDEO/DSUB-COMP]	BLACK & WHITE	255	255	255	▲			○
12	R DRIVE1 [DVI-PC/DVI-STB/DSUB-RGB]	COOL	255	255	255	▲			○
13	G DRIVE1 [DVI-PC/DVI-STB/DSUB-RGB]	COOL	255	255	255	▲			○
14	B DRIVE1 [DVI-PC/DVI-STB/DSUB-RGB]	COOL	255	255	255	▲			○
15	R DRIVE2 [DVI-PC/DVI-STB/DSUB-RGB]	NORMAL	255	255	255	▲			○
16	G DRIVE2 [DVI-PC/DVI-STB/DSUB-RGB]	NORMAL	255	255	255	▲			○
17	B DRIVE2 [DVI-PC/DVI-STB/DSUB-RGB]	NORMAL	255	255	255	▲			○
18	R DRIVE3 [DVI-PC/DVI-STB/DSUB-RGB]	WARM	255	255	255	▲			○
19	G DRIVE3 [DVI-PC/DVI-STB/DSUB-RGB]	WARM	255	255	255	▲			○
20	B DRIVE3 [DVI-PC/DVI-STB/DSUB-RGB]	WARM	255	255	255	▲			○
21	R DRIVE4 [DVI-PC/DVI-STB/DSUB-RGB]	BLACK & WHITE	255	255	255	▲			○
22	G DRIVE4 [DVI-PC/DVI-STB/DSUB-RGB]	BLACK & WHITE	255	255	255	▲			○
23	B DRIVE4 [DVI-PC/DVI-STB/DSUB-RGB]	BLACK & WHITE	255	255	255	▲			○
24	Black Level(RGB_AMP)	TV/VIDEO	254	127	127				
25	Black Level(RGB_AMP)	PC	254	127	127				
26	Reference Amplitude(RGB_AMP)	TV/VIDEO	254	127	127				
27	Reference Amplitude(RGB_AMP)	PC	254	127	127				
28	Display for Max. Amplitude Level	Main	-	-	-				
29	Display for Max. Amplitude Level	SUB	-	-	-				
30	SUB_CONTRAST (RF)	MAIN	15	8	8				
31	SUB_CONTRAST (AV1)	MAIN/SUB COMPOSITE mode	15	7	7				
32	SUB_CONTRAST (RF)	SUB	15	8	8				
33	SUB_CONTRAST (AV4)	MAIN/SUB COMPOSITE mode	15	7	7				
34	SUB_COLOR (VIDEO-PAL/SECAM)	MAIN	15	6	6				
35	SUB_COLOR (RF-PAL/SECAM)	MAIN	15	8	8				
36	SUB_COLOR (VIDEO-NTSC)	MAIN	15	8	8				
37	SUB_COLOR (RF-NTSC)	MAIN	15	6	6				
38	SUB_COLOR (VIDEO-PAL/SECAM)	SUB	15	8	8				
39	SUB_COLOR (RF-PAL/SECAM)	SUB	15	8	8				
40	SUB_COLOR (VIDEO-NTSC)	SUB	15	8	8				
41	SUB_COLOR (RF-NTSC)	SUB	15	8	8				
42	TINT (VIDEO)	MAIN	63	33	33	▲	○		
43	TINT (RF)	MAIN	63	33	33	▲	○		
44	TINT (VIDEO)	SUB	63	33	33	▲	○		
45	TINT (RF)	SUB	63	33	33	▲	○		
46	S_B-Y_ADJ	MAIN	15	8	8				
47	S_R-Y_ADJ	MAIN	15	8	8				
48	S_B-Y_ADJ	SUB	15	8	8				
49	S_R-Y_ADJ	SUB	15	8	8				
50	BPF_Q (4.43MHz)	MAIN	3	3	3				
51	BPF_f0 (4.43MHz)	MAIN	3	1	1				
52	Y_DL (4.5MHz) For Asia	MAIN	10	5	5				
53	Y_DL (5.5MHz PAL/NTSC4.43) For Asia	MAIN	10	3	3				
54	Y_DL (5.5MHz SECAM) For Asia	MAIN	10	0	0				
55	Y_DL (6.0PAL/NTSC4.43) For Asia	MAIN	10	9	9				
56	Y_DL (6.0SECAM) For Asia	MAIN	10	9	9				
57	Y_DL (VIDEO PAL/NTSC4.43)	MAIN	10	6	6				
58	Y_DL (VIDEO SECAM)	MAIN	10	8	8				
59	Y_DL (VIDEO NTSC)	MAIN	10	6	6				
60	BELL_f0	MAIN	1	0	0				
61	Y_OUT_LEVEL (VIDEO)	MAIN	63	13	13				
62	Free								
63	Y_OUT_LEVEL (TEXT)	MAIN	63	0	0				
64	C_OUT_LEVEL (VIDEO)	MAIN	63	7	7				
65	Free								
66	C_OUT_LEVEL (TEXT)	MAIN	63	0	0				
67	Y_OUT_LEVEL (TEXT)	SUB	63	12	12				
68	Y_OUT_LEVEL (VIDEO)	SUB	63	13	13				
69	Free								
70	C_OUT_LEVEL (TEXT)	SUB	63	7	7				
71	C_OUT_LEVEL (VIDEO)	SUB	63	7	7				
72	Free								
73	BPF_Q (4.43MHz)	SUB	3	3	3				
74	BPF_f0 (4.43MHz)	SUB	3	1	1				
75	Y_DL (4.5MHz) For Asia	SUB	10	5	5				
76	Y_DL (5.5MHz PAL/NTSC4.43) For Asia	SUB	10	2	2				
77	Y_DL (5.5MHz SECAM) For Asia	SUB	10	0	0				
78	Y_DL (6.0PAL/NTSC4.43) For Asia	SUB	10	7	7				
79	Y_DL (6.0SECAM) For Asia	SUB	10	10	10				
80	Y_DL (VIDEO PAL/NTSC4.43)	SUB	10	8	8				
81	Y_DL (VIDEO SECAM)	SUB	10	6	6				
82	Y_DL (VIDEO NTSC)	SUB	10	5	5				
83	BELL_f0	SUB	1	0	0				
84	C_TRAP_SW (COMB=OFF-PAL/NTSC4.43/NTSC3.58)	MAIN	1	0	0				
85	C_TRAP_SW (COMB=OFF-PAL/NTSC4.43/NTSC3.58)	SUB	1	0	0				
86	MVM (VIDEO)	-	1	0	0				
87	AFC_GAIN (AV00)	-	3	0	0				
88	AFC_GAIN (AV1)	-	3	0	0				

* 32/42PD5000VA : Refer to the Service Manual for PD32/42-A3000(No.003E).

○: should be adjusted
▲: should be followed previous data

ADJ.	Function			Maximum Value	Default		Changed Component			
No.	Adjustment Items	Mode			32"	42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
89	AFC_GAIN (AV2)	-		3	0	0				
90	AFC_GAIN (AV3)	-		3	0	0				
91	AFC_GAIN (AV4)	-		3	0	0				
92	S_INHBT	-		1	0	0				
93	S_ID	-		1	0	0				
94	S_GP	-		3	0	0				
95	S_V_ID	-		1	0	0				
96	BELL/HPF	-		3	3	3				
97	Cb offset1	MAIN		15	8	8				
98	Cr offset1	MAIN		15	8	8				
99	Cb offset1	SUB		15	8	8				
100	Cr offset1	SUB		15	8	8				
101	Sharpness Gain(VIDEO) PAL	MAIN		15	8	8				
102	Sharpness Gain(RF)	MAIN		15	8	8				
103	Sharpness EQ(4.5MHz)	MAIN		3	1	1				
104	Sharpness EQ(5.5MHz)	MAIN		3	1	1				
105	Sharpness EQ(6.0/6.5MHz)	MAIN		3	1	1				
106	Sharpness EQ(VIDEO)	MAIN		3	1	1				
107	Sharpness f0(VIDEO) PAL	MAIN		3	2	2				
108	Sharpness f0(RF)	MAIN		3	2	2				
109	Sharpness Gain(VIDEO) PAL	SUB		15	9	9				
110	Sharpness Gain(RF)	SUB		15	10	10				
111	Sharpness EQ(4.5MHz)	SUB		3	1	1				
112	Sharpness EQ(5.5MHz)	SUB		3	1	1				
113	Sharpness EQ(6.0/6.5MHz)	SUB		3	1	1				
114	Sharpness EQ(VIDEO)	SUB		3	1	1				
115	Sharpness f0(VIDEO) PAL	SUB		3	2	2				
116	Sharpness f0(RF)	SUB		3	2	2				
117	LPF	MAIN		1	0	0				
118	LPF	SUB		1	0	0				
119	SECAM D-Trap	MAIN/SUB		1	1	1				
120	FILTER SW(RF)	MAIN		1	0	0				
121	FILTER SW(RF)	SUB		1	0	0				
122	NTSC Comb(Comb off)	SUB		1	1	1				
123	HS Phase	MAIN		1	0	0				
124	HS Phase	SUB		1	0	0				
125	P/N ID	MAIN		1	0	0				
126	P/N ID	SUB		1	0	0				
127	Y/C_SEP_MODE (COMB=OFF-PAL)	-		3	0	0				
128	Y-Pf$_0$	-		1	0	0				
129	Y-EQ_GAIN	-		3	2	2				
130	Y-EQ/N.C_LIM	-		3	0	0				
131	Y-LPF	-		1	0	0				
132	V-EMPH_GAIN	-		7	1	1				
133	V-EMPH_N.L	-		7	3	3				
134	V-EMPH_CORE	-		3	3	3				
135	D RANGE	-		1	0	0				
136	DY_GAIN	MAIN NTSC mode		15	9	9				
137	DC_GAIN	MAIN NTSC mode		15	6	6				
138	VAP_GAIN	MAIN NTSC mode		7	2	2				
139	VAP_INV	MAIN NTSC mode		31	10	10				
140	YH_CORE	MAIN NTSC mode		3	0	0				
141	YHCGAIN	MAIN NTSC mode		1	1	1				
142	CDL	MAIN NTSC mode		7	3	3				
143	YNRK	MAIN NTSC mode		1	1	1				
144	YNRINV	MAIN NTSC mode		1	0	0				
145	YNRLIM	MAIN NTSC mode		3	1	1				
146	CNRK			1	1	1				
147	CNRINV			1	0	0				
148	CNRLIM			3	1	1				
149	YPFG			15	10	10				
150	SEPA_LEVEL	480i/576i		3	2	2				
151	SEPA_LEVEL	480p/576p		3	2	2				
152	SEPA_LEVEL	1080i_50		3	2	2				
153	SEPA_LEVEL	1080i_60/720p		3	2	2				
154	AUTO_FM/AM(D11-D8)	-		15	2	2				
155	AUTO_FM/AM(D7-D0)	-		254	189	189				
156	A2_THRESHOLD(D11-D8)	-		15	0	0				
157	A2_THRESHOLD(D7-D0)	-		254	112	112				
158	PRE_AM	except 4.5MHz(except BIL/STE)		254	17	17				
159	VOL_SCART1 (D15-D8)	-		254	115	115				
160	VOL_SCART1 (D7-D5)	-		7	0	0				
161	PRE_SCART	-		254	31	31				
162	PRE_FM	4.5MHz(JAPAN)		254	34	34				
163	PRE_FM	4.5MHz(except BTSC-SAP)		254	32	32				
164	PRE_FM	4.5MHz(BTSC-SAP)		254	60	60				
165	PRE_FM	4.5MHz(KOREA-except BIL/STE)		254	19	19				
166	PRE_FM	4.5MHz(KOREA-BIL/STE)		254	34	34				
167	PRE_FM	except 4.5MHz(except BIL/STE)		254	17	17				
168	PRE_FM	except 4.5MHz(BIL/STE)		254	27	27				
169	PRE_NICAM	-		254	57	57				
170	Screen Saver -Picture shift amount 0:1pixel 1:2pixels 2:3pixels			2	0	0				
171	Thermal Sensor available 0:NO 1:YES			1	0	0				
172	Video Input Function available 0:NO 1:YES			1	1	1				
173	Screen Saver -Picture Shift direction 0:dia 1:cross 2:up/down 3:left/right			3	0	0				
174	AUDIO Function available 0 :NO, 1 :YES			1	1	1				
175	Remouto Function available 0 :NO, 1 :YES			1	1	1				
176	Power Save On/Off Setting at Initialize,Reset and Shipping	0:Change 1: Don't Change		1	0	0				
177	DVI-STB/RGB-COMPONENT Function available 0 :NO, 1 :YES			1	0	0				

32PD5000/42PD5000 (PW1)

○: should be adjusted
▲: should be followed previous data

ADJ. No.	Function			Maximum Value	Default		Changed Component			
	Adjustment Items	Mode			32"	42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
178	Free									
179	Free									
180	Terminal Mode Function available 0:Not Available, 1:Available	RS232C		1	0	0				
181	Free									
182	AGC_LEVEL AGCL	ALL Mode		3	0	0				
183	TEXT H sync delay	-		127	0	0				
184	TEXT V sync delay	-		127	50	50				
185	TEXT_H_POSITION	-		254	42	42				
186	TEXT_V_POSITION	-		254	38	38				
187	Lower Limits value for Sync Detect of 2ms interval	For AFC at TV mode		254	25	25				
188	Upper Limits Value for Sync Detect of 2ms interval	For AFC at TV mode		254	40	40				
189	Lower Limits value for Sync Detect of 2ms interval	For Free Running at TV mode		254	30	30				
190	Upper Limits Value for Sync Detect of 2ms interval	For Free Running at TV mode		254	45	45				
191	Lower Limits value for Sync Detect of 2ms interval	For AUTO OFF at TV mode		254	25	25				
192	Upper Limits Value for Sync Detect of 2ms interval	For AUTO OFF at TV mode		254	35	35				
193	Lower Limits value for Sync Detect of 2ms interval	For Free Running at AV mode		254	30	30				
194	Upper Limits Value for Sync Detect of 2ms interval	For Free Running at AV mode		254	45	45				
195	Counting time for discrimination of fV (TB1274)	-		31	2	2				
196	Free			1	0	0				
197	Counting time for discrimination of Sync. (M30625/TA1370)	-		31	2	2				
198	Input Source of fV/fH judgment (0:M30625,1:TA1370)	Component Mode		1	0	0				
199	Counting time for discrimination of fV (M30625/TA1370)	-		31	2	2				
200	Y_DL (6.5MHz PAL/NTSC4.43) For Asia	Main		10	7	7				
201	Y_DL (6.5MHz SECAM) For Asia	Main		10	10	10				
202	Y_DL (6.5MHz PAL/NTSC4.43) For Asia	Sub		10	4	4				
203	Y_DL (6.5MHz SECAM) For Asia	Sub		10	10	10				
204	PDP-BLK ON/OFF	1:ON, 0:OFF		1	0	0				
205	Counting time for discrimination of fH (M30625/TA1370)	-		31	2	2				
206	Sharpness f0(L)	Sub		3	2	2				
207	NJW1320_OUT1_GAIN	VIDEO PWB		1	0	0				
208	NJW1320_OUT2_GAIN	VIDEO PWB		1	0	0				
209	Sharpness f0(L')	Sub		3	2	2				
210	AFC_GAIN (Except AV00 mode)	Except AV00 mode		3	0	0				
211	Timer Correction (for error of ceramic-filter osc.freq.)			62	34	34				
212	Brightness Center (CM)	NT2/NT3/HD2/HD3/PAL2/PAL3/HD9/HD10/NT4/PAL4		254	128	128				
213	Brightness Center (CM)	HD1/HD4/HD5/HD6/HD7/HD8		254	124	124				
214	Brightness Center (CM)	MULTI PICTURE/NT1/PAL1		254	128	128				
215	Free									
216	Contrast Center (CM)	TV/VIDEO(AV1/AV4 mode)		254	137	137				
217	Free									
218	Color Center (CM)	NT1/NT2/NT4/HD3/HD4/HD6/PAL4		127	80	80				
219	Color Center (CM)	PAL1/PAL2/HD8/HD9		127	80	80				
220	Color Center (CM)	NT3/HD1/HD2/HD5/PAL3/HD7/HD10		127	80	80				
221	Tint Center (CM)	PAL1		254	118	118				
222	Tint Center (CM)	NT1/NT2/NT4/HD3/HD4/HD6		254	120	120				
223	Tint Center (CM)	PAL2/HD8/HD10/PAL4		254	115	115				
224	Tint Center (CM)	NT3/HD1/HD2/HD5/PAL3/HD7/HD9		254	124	124				
225	Center of Sharpness (HV Enhancer Gain for Y) For Europe	TV		31	19	19				
226	Center of Sharpness (HV Enhancer Gain for Y) For Europe	VIDEO		31	18	18				
227	Center of Sharpness (HV Enhancer Gain for Y) For Europe	HD5/HD6		31	11	11				
228	Center of Sharpness (HV Enhancer Gain for Y) For Europe	HD1/HD4/HD7/HD8		31	7	7				
229	Center of Sharpness (HV Enhancer Gain for Y) For Europe	HD2/HD3/HD9/HD10		31	15	15				
230	Center of Sharpness (HV Enhancer Gain for Y) For Europe	NT2/NT3/PAL2/PAL3/NT4/PAL4		31	15	15				
231	Center of Sharpness (HV Enhancer Gain for Y) For Europe	TEXT(2 picture)		31	7	7				
232	Maximum Value of Contrast at REAL/NORMAL mode			254	188	188				
233	Offset Value of Contrast data at SPLIT mode			120	90	90				
234	Offset value of gain for Black Stretch function	except OFF/LOW/HIGH		63	33	33				
235	Demonstration [White] 0-3:None 4:0 5:+10W 6:+20W 7:+30W	Mode(common)		7	5	5				
236	Demonstration 0:Normal 1:Peak	Mode		1	1	-				
237	Demonstration [Middle] 0:+0W 1:+10W 2:+20W 3:+30W	Mode(common)		3	3	3				
238	Demonstration 0:Normal 1:Peak	Mode		1	-	0				
239	Horizontal Enhance	TEXT		3	3	3				
240	YNR Input Level at Low level for DVI-STV Mode	1080i-60/1080i-50/720p-60		7	2	2				
241	YNR Input Level at Low level for DVI-STV Mode	480i/480p/576i/576p/VGA		7	2	2				
242	CNR Input Level at Low level for DVI-STV Mode	1080i-60/1080i-50/720p-60		7	2	2				
243	CNR Input Level at Low level for DVI-STV Mode	480i/480p/576i/576p/VGA		7	2	2				
244	Vertical Enhance	TEXT		3	3	3				
245	Demonstration Mode 0:off 1:on			1	0	0				
246	Free									
247	Free									
248	HV Enhancer Gain for C	TEXT		31	0	0				
249	YNR(NR) Input Level	RF Mode		7	1	1				
250	YNR Input Level at Low level for AV1-4 Mode	VIDEO		7	3	3				
251	YNR Input Level at Low level for AV1-4 Mode	NT2/NT3/PAL2/PAL3/NT4/PAL4		7	3	3				
252	YNR Input Level at Low level for AV1-4 Mode	HD1/HD4/HD5/HD6/HD7/HD8		7	3	3				
253	YNR Input Level at Low level for AV1-4 Mode	HD2/HD3/HD9/HD10		7	3	3				
254	CNR Input Level at Low level for AV1-4 Mode	VIDEO		7	3	3				
255	CNR Input Level at Low level for AV1-4 Mode	NT2/NT3/PAL2/PAL3/NT4/PAL4		7	3	3				
256	CNR Input Level at Low level for AV1-4 Mode	HD1/HD4/HD5/HD6/HD7/HD8		7	3	3				
257	CNR Input Level at Low level for AV1-4 Mode	HD2/HD3/HD9/HD10		7	3	3				
258	Heat APC function available 0:NO, 1: YES			1	1	1				
259	Gamma SW (0:1.0 1:2.2 2:2.8)	TV/VIDEO		2	1	1				
260	Gamma SW (0:1.0 1:2.2 2:2.8)	DVI-PC/DVI-STB/DSUB-RGB		2	1	1				
261	Select for APC function			1	0	0				
262	"CCFMD" function	TV/VIDEO		1	0	0				
263	"CCFMD" function	DVI-PC/DVI-STB/DSUB-RGB		1	0	0				
264	NTSC/EBU(CCFORM)	NT1/NT2/HD3/HD4/HD6/HD8/HD10/PAL1/PAL2		1	0	0				
265	NTSC/EBU(CCFORM)	TV/VIDEO/NT3/PAL3/HD1/HD2/HD5/HD7/HD9/NT4/PAL4		1	0	0				
266	NTSC/EBU(CCFORM)	DVI-PC/DVI-STB/DSUB-RGB		1	0	0				

32PD5000/42PD5000 (PW1)

○: should be adjusted
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ADJ. No.	Function		Maximum Value	Default		Changed Component			
	Adjustment Items	Mode		32"	42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
267	Correction for Tracking (DCBON)	TV/VIDEO-Color Temp. : COOL	1	0	0				
268	Correction for Tracking (DCBON)	TV/AV-Col. Temp. : Nor/War	1	1	1				
269	Correction for Tracking (DCBON)	DVI-PC/DVI-STB/DSUB-RGB	1	1	1				
270	Color Temp. Correction		3	0	0				
271	Typical Value of Contrast OSD	DYNAMIC	31	31	31				
272	PC Power Save function (0:Impossible 1:Possible)		1	1	1				
273	Waite Time for POWER SAVE function (s)	VIDEO/PC	254	15	15				
274	Lower Limits value for Sync Detect of 2ms interval	For Power Save at AV mode	254	5	5				
275	Upper Limits Value for Sync Detect of 2ms interval	For Power Save at AV mode	254	200	200				
276	Horizontal Position of OSD	60Hz	15	7	7				
277	Vertical Position of OSD	60Hz	15	7	7				
278	PinP Function 0:PinP, 1:Infomation1, 2:Infomaiton Split		2	0	0				
279	Select for WIDE Mode		1	1	1				
280	Temperature for FAN Restart (Temp_High)		254	58	58				
281	Temperature for FAN Stop (Temp_Low)		254	55	55				
282	Internal Temperature Display ℃		125	-	-				
283	PDP micom Version Display		255	-	-				
284	Total Operating Hours of PDP panel		65535	-	-				
285	Initialize function 0:Keep data, 1:Initialize	No.0-No.23,30-33,42-45,289,293,294Adj No.701-703,	1	0	0				
286	L standard PLL gating HIGH [Europe model]		1	0	0				
287	Select for APC output [Except Europe model]	Main FE	2	1	1				
288	Other New function (Shin Doga mode) 0:Off, 1:On	50Hz	1	0	0				
289	AGC adjustment (MFE) [Except Europe model]	MAIN	63	50	50	▲		○	
290	AGC adjustment (MFE) [Europe model]	MAIN	63	20	20				
291	AGC INPUT(MFE)	MAIN	-	-	-				
292	Other New function (Shin Doga mode) 0:Off, 1:On	70Hz(PC)	1	0	0				
293	SUB CONTRAST AV2	MAIN/SUB COMPOSITE mode	15	8	8				
294	SUB CONTRAST AV3	MAIN/SUB COMPOSITE mode	15	8	8				
295	Contrast Center (CM)	AV2	254	137	137				
296	Contrast Center (CM)	AV1	254	137	137				
297	Brightness center (CM) offset	AV2	254	127	127				
298	Brightness center (CM) offset	AV1	254	127	127				
299	Other New function (Shin Doga mode) 0:Off, 1:On	60Hz	1	1	1				
300	3D ON/OFF 0:ON,1:OFF(Through)		1	0	0				
301	Input Select of TA1370 0:HD1/VD1,1:HD3/VD3	Main/Sub	1	0	0				
302	Sharpness Gain(RF/NR)	Main/Sub	15	3	3				
303	3Line Y/C Main- Sub SW	0:Main, 1: Sub	1	0	0				
304	Offset Value(+/-) of Upper Limit (for TB1274:SUB-CONT)	Single Picture mode	18	2	2				
305	Offset Value(+/-) of Upper Limit (for FC :RGB-AMP)	Multi Picture mode	18	2	2				
306	Reference Amplitude(RGB_AMP)	Multi Picture mode	254	127	127				
307	Component Frq.(fH) Setup (0:28/31/33/45KHz,1:28/31/45KHz)		1	0	0				
308	Terget value of White peak Adj.	Single Picture mode	237	235	235				
309	Sharpness Gain(S VIDEO)	Main	15	7	7				
310	Sharpness Gain(S VIDEO)	Sub	15	7	7				
311	Select color control (0: Asia, 1: South America)	Main/Sub	1	0	0				
312	Sharpness Gain Main(N-PAL)		15	8	8				
313	Sharpness f0 Main(N-PAL)		3	2	2				
314	Sharpness Gain Sub (N-PAL)		15	9	9				
315	Sharpness f0 Sub (N-PAL)		3	2	2				
316	Delay Time ON/OFF for Lipsync circuit 0:Off, 1:On		1	1	1				
317	Sync Mode SW		7	0	0				
318	Set Sound System at Auto mode of Sound Sys. (0:auto,1:4.5MHz)	Main/Sub	1	0	0				
319	Power Restart by cancelling reset from Power Save Mode in PC input	0:keep last condition 1:restart	1	0	0				
320	Change Europe Model for Destination of North America (OSD, Wide Mode etc.) available	0:NO 1:YES(DAY/NIGHT etc.)	1	0	0				
321	Count Souce for ON/OFF Timer	0:MCU-250ms, 1:AC-50/60Hz	1	0	0				
322	Wide Mode Selection for Europe (Normal: 5 modes, For Service: 10 modes)	0:Normal 1:For Service	1	0	0				
323	Forced AVC type available	0:Normal type , 1: Forced AVC type	1	0	0				
324	Sharpness Gain Main(M-PAL)		15	8	8				
325	Sharpness f0 Main(M-PAL)		3	2	2				
326	Sharpness Gain Sub (M-PAL)		15	9	9				
327	Sharpness f0 Sub (M-PAL)		3	2	2				
328	CNR Input Level at Low level for Dsub Comp. Mode	NT2/NT3/PAL2/PAL3/NT4/PAL4	7	2	2				
329	CNR Input Level at Low level for Dsub Comp. Mode	HD1/HD4/HD5/HD6/HD7/HD8	7	2	2				
330	CNR Input Level at Low level for Dsub Comp. Mode	HD2/HD3/HD9/HD10	7	2	2				
331	Sharpness Gain(VIDEO) NTSC3.58	MAIN	15	9	9				
332	Sharpness f0(VIDEO) NTSC3.58	MAIN	3	2	2				
333	Sharpness Gain(VIDEO) NTSC3.58	SUB	15	8	8				
334	Sharpness f0(VIDEO) NTSC3.58	SUB	3	2	2				
335	Sharpness Gain(VIDEO) SECAM,B/W	MAIN	15	10	10				
336	Sharpness f0(VIDEO) SECAM,B/W	MAIN	3	2	2				
337	Sharpness Gain(VIDEO) SECAM,B/W	SUB	15	8	8				
338	Sharpness f0(VIDEO) SECAM,B/W	SUB	3	2	2				
339	Sharpness Gain(VIDEO) NTSC4.43	MAIN	15	9	9				
340	Sharpness f0(VIDEO) NTSC4.43	MAIN	3	2	2				
341	Sharpness Gain(VIDEO) NTSC4.43	SUB	15	8	8				
342	Sharpness f0(VIDEO) NTSC4.43	SUB	3	2	2				
343	Brightness Limitted Function of PANEL [APSON]		1	1	1				
344	VsVa WAIT TIMER [RISTIM]		15	5	5				
345	CONTRAST initial value	Panel Life -Extend1	127	93	93				
346	Correcting Time Interval	Panel Life -Extend1	127	10	10				
347	CONTRAST additional value	Panel Life -Extend1	127	1	1				
348	CONTRAST initial value	Panel Life -Extend2	127	63	63				
349	Correcting Time Interval	Panel Life -Extend2	127	6	6				
350	CONTRAST additional value	Panel Life -Extend2	127	1	1				
351	L_PLL.GAIN		1	0	0				
352	Free								
353	Free								
354	Free								
355	Free								

○: should be adjusted
▲: should be followed previous data

ADJ.	Function			Maximum Value	Default		Changed Component			
No.	Adjustment Items	Mode			32"	42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
356	SEPA_LEVEL_DSUB	480i/576i		3	2	2				
357	SEPA_LEVEL_DSUB	480p/576p		3	2	2				
358	SEPA_LEVEL_DSUB	1080i_50		3	2	2				
359	SEPA_LEVEL_DSUB	1080i_60/720p		3	2	2				
360	HD-PHASE_DSUB	480i/576i		63	20	20				
361	HD-PHASE_DSUB	480p/576p		63	20	20				
362	HD-PHASE_DSUB	1080i_50		63	20	20				
363	HD-PHASE_DSUB	1080i_60/720p		63	20	20				
364	Y_DL (L)	MAIN		10	4	4				
365	Y_DL (L')	MAIN		10	4	4				
366	Y_DL (L)	Sub		10	1	1				
367	Y_DL (L')	Sub		10	1	1				
368	Sharpness Gain(L)	MAIN		15	10	10				
369	Sharpness Gain(L')	MAIN		15	10	10				
370	Sharpness Gain(L)	SUB		15	8	8				
371	Sharpness Gain(L')	SUB		15	8	8				
372	Sharpness f0(L)	MAIN		3	2	2				
373	Sharpness f0(L')	MAIN		3	2	2				
374	BURN-IN enable/ disenable	0:Disenable, 1:Enable		1	1	1				
375	BURN-IN mode			2	2	2				
376	CM_THRESHOLD (D15-D8)	-		254	0	0				
377	CM_THRESHOLD (D7 -D0)	-		254	36	36				
378	Sharpness Gain(RF M)	MAIN		15	11	11				
379	Sharpness Gain(RF M)	Sub		15	11	11				
380	Sharpness f0 (RF M)	Main		3	2	2				
381	Sharpness f0 (RF M)	SUB		3	2	2				
382	Counting Value of 2ms Sync.Detect	MAIN		-	-	-				
383	Counting Value of 2ms Sync.Detect	SUB		-	-	-				
384	TB1274 Read Data(00h)	Main		-	-	-				
385	TB1274 Read Data(01h)	Main		-	-	-				
386	TB1274 Read Data(00h)	Sub		-	-	-				
387	TB1274 Read Data(01h)	Sub		-	-	-				
388	MSP Read Data (CNTROL) (D15-D8)			-	-	-				
389	MSP Read Data (CNTROL) (D7 -D0)			-	-	-				
390	MSP Read Data (STANDARD_RES) (D15-D8)			-	-	-				
391	MSP Read Data (STANDARD_RES) (D7 -D0)			-	-	-				
392	MSP Read Data (STATUS) (D15-D8)			-	-	-				
393	MSP Read Data (STATUS) (D7 -D0)			-	-	-				
394	TA1370G Read Data(00h)	VIDEO PWB		-	-	-				
395	TA1370G Read Data(01h)	VIDEO PWB		-	-	-				
396	TA1370G Read Data(00h)	FORMATTER PWB		-	-	-				
397	TA1370G Read Data(01h)	FORMATTER PWB		-	-	-				
398	uPD64084 Read Data(00H)			-	-	-				
399	uPD64084 Read Data(01h)			-	-	-				
400	Language (Refer to below)			6	0	0				
401	Hotel Mode(0:No,1:Yes)			1	0	0				
402	Analog Data (0:Keep EEPROM,1:Not Keep to EEPROM)			1	0	0				
403	Maximum Volume Limit			63	63	63				
404	Power Mode(0:Last mode, 1:Pos1, 2:V1, 3:V2, 4:V3, 5:V4)			5	0	0				
405	Channel Select(0:CCIR, 1:CHINA)			1	0	0				
406	Auto_sound 4.5 (0:Korea, 1:BTSC, 2:Japan)			2	0	0				
407	T/TEXT(0: None, 1:Yes)			1	1	1				
408	TEXT Language			7	0	0				
409	IIC BUS Data/Clock Open(0:Close, 1:Open)			1	0	0				
410	Channel Preset(0:VESTEL, 1:GIFU, 2:HAMA, 3:HFDM,4:AUSTRALIA)			4	1	1				
411	Detect and Display Tele-Cinema (0:normal 1:Tele-Cinema)			-	-	-				
412	V FREQ 60Hz Force (0:None, 1:Yes)	Main/Sub		1	0	0				
413	COLOR SYSTEM CONTROL-MODE(0:BW, 2:3.58NTSC, 3:4.43NTSC, ･･･)	Main		-	-	-				
414	COLOR SYSTEM CONTROL-MODE(0:BW, 2:3.58NTSC, 3:4.43NTSC, ･･･)	Sub		-	-	-				
415	Horizontal Filter SW [HHPF0]	NTSC		1	0	0				
416	Enhancer Gain [HHPF1]	PAL		1	0	0				
417	Enhancer Gain [HHPF2]	HD		1	0	0				
418	Horizontal Coring Level (Enhancer Gain) AS[HECOR0_PO]	NT1-RF		15	-	1				
419	Horizontal Coring Level (Enhancer Gain) AS[HECOR1_PO]	PAL1-RF / Multi picture		15	-	1				
420	Horizontal Coring Level (Enhancer Gain) [HECOR2_PO]	NT1-Video		15	-	1				
421	Horizontal Coring Level (Enhancer Gain) [HECOR3_PO]	PAL1-Video		15	-	1				
422	Horizontal Coring Level (Enhancer Gain) [HECOR4_PO]	NT2/NT3/NT4/PAL2/PAL3/PAL4		15	-	1				
423	Horizontal Coring Level (Enhancer Gain) [HECOR5_PO]	HD2/HD3/HD9/HD10		15	-	1				
424	Horizontal Coring Level (Enhancer Gain) [HECOR6_PO]	HD1/HD4/HD5/HD6/HD7/HD8		15	-	0				
425	Horizontal Coring Level (Enhancer Gain) [HECORPC_PO]	PC		15	-	1				
426	Horizontal Coring Level (Enhancer Gain) EU[HECORE_PO]	PAL1-RF / Multi picture		15	-	1				
427	Vertical Coring Level (Enhancer Gain) AS[VECOR0_PO]	NT1-RF		15	-	1				
428	Vertical Coring Level (Enhancer Gain) AS[VECOR1_PO]	PAL1-RF / Multi picture		15	-	1				
429	Vertical Coring Level (Enhancer Gain) [VECOR2_PO]	NT1-Video		15	-	1				
430	Vertical Coring Level (Enhancer Gain) [VECOR3_PO]	PAL1-Video		15	-	1				
431	Vertical Coring Level (Enhancer Gain) [VECOR4_PO]	NT2/NT3/NT4/PAL2/PAL3/PAL4		15	-	0				
432	Vertical Coring Level (Enhancer Gain) [VECOR5_PO]	HD2/HD3/HD9/HD10		15	-	0				
433	Vertical Coring Level (Enhancer Gain) [VECOR6_PO]	HD1/HD4/HD5/HD6/HD7/HD8		15	-	0				
434	Vertical Coring Level (Enhancer Gain) [VECORPC_PO]	PC		15	-	0				
435	Vertical Coring Level (Enhancer Gain) EU[VECORE_PO]	PAL1-RF / Multi picture		15	-	0				
436	Horizontal Coring Level (Enhancer Gain) AS[HECOR0_P1]	NT1-RF		15	1	-				
437	Horizontal Coring Level (Enhancer Gain) AS[HECOR0_P2]	PAL1-RF / Multi picture		15	1	-				
438	Horizontal Coring Level (Enhancer Gain) [HECOR0_P3]	NT1-Video		15	1	-				
439	Horizontal Coring Level (Enhancer Gain) [HECOR0_P4]	PAL1-Video		15	1	-				
440	Horizontal Coring Level (Enhancer Gain) [HECOR0_P5]	NT2/NT3/NT4/PAL2/PAL3/PAL4		15	1	-				
441	Horizontal Coring Level (Enhancer Gain) [HECOR0_P6]	HD2/HD3/HD9/HD10		15	1	-				
442	Horizontal Coring Level (Enhancer Gain) [HECOR0_P7]	HD1/HD4/HD5/HD6/HD7/HD8		15	0	-				
443	Horizontal Coring Level (Enhancer Gain) [HECORPC_P1]	PC		15	1	-				
444	Horizontal Coring Level (Enhancer Gain) EU[HECORE_P1]	PAL1-RF / Multi picture		15	1	-				

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○: should be adjusted
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ADJ. No.	Function			Maximum Value	Default		Changed Component			
	Adjustment Items	Mode			32"	42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
445	Vertical Coring Level (Enhancer Gain) AS[VECOR0_P1]	NT1-RF		15	1	-				
446	Vertical Coring Level (Enhancer Gain) AS[VECOR0_P2]	PAL1-RF / Multi picture		15	1	-				
447	Vertical Coring Level (Enhancer Gain) [VECOR0_P3]	NT1-Video		15	1	-				
448	Vertical Coring Level (Enhancer Gain) [VECOR0_P4]	PAL1-Video		15	1	-				
449	Vertical Coring Level (Enhancer Gain) [VECOR0_P5]	NT2/NT3/NT4/PAL2/PAL3/PAL4		15	0	-				
450	Vertical Coring Level (Enhancer Gain) [VECOR0_P6]	HD2/HD3/HD9/HD10		15	0	-				
451	Vertical Coring Level (Enhancer Gain) [VECOR0_P7]	HD1/HD4/HD5/HD6/HD7/HD8		15	0	-				
452	Vertical Coring Level (Enhancer Gain) [VECORPC_P1]	PC		15	0	-				
453	Vertical Coring Level (Enhancer Gain) EU[VECORE_P1]	PAL1-RF / Multi picture		15	0	-				
454	YFRNR Input Gain (Main) 2 pictures [MYNRG0]	HD-except HD		7	1	1				
455	<HD-NTSC,HD-PAL(Sub) [MYNRG1]	HD-HD		7	4	4				
456	4 pictures [MYNRG2]	NT-*/PAL-*		7	1	1				
457	[MYNRG3]	HD-*		7	4	4				
458	YFRNR Input Gain (Sub) [YCNRG0]	2 pictures		7	4	4				
459	[YCNRG1]	4pictures/12pictures		7	1	1				
460	CFRNR Input Gain (Main) 2 pictures [MCNRG0]	HD-except HD		7	3	3				
461	<HD-NTSC,HD-PAL(Sub) [MCNRG1]	HD-HD		7	4	4				
462	[MCNRG2]	NT-*/PAL-*		7	4	4				
463	[MCNRG3]	HD-*		7	4	4				
464	CFRNR Input Gain (Sub) [SCNRG0]	2 pictures		7	3	3				
465	[SCNRG1]	4pictures/12pictures		7	4	4				
466	YFRNR Transition Level (Main/Sub) [MYNRP0]	NT1/ PAL1 / Multi picture		7	0	0				
467	[MYNRP5]	NT1/PAL1-Video		7	0	0				
468	[MYNRP6]	NT2/NT3/NT4/PAL2/PAL3/PAL4		7	0	0				
469	[MYNRP7]	HD2/HD3/HD9/HD10		7	0	0				
470	[MYNRP8]	HD1/HD4/HD5/HD6/HD7/HD8		7	0	0				
471	CFRNR Transition Level (Main/Sub) [MCNRP0]	NT1/ PAL1 / Multi picture		7	2	2				
472	[MCNRP5]	NT1/PAL1-Video		7	2	2				
473	[MCNRP6]	NT2/NT3/NT4/PAL2/PAL3/PAL4		7	2	2				
474	[MCNRP7]	HD2/HD3/HD9/HD10		7	2	2				
475	[MCNRP8]	HD1/HD4/HD5/HD6/HD7/HD8		7	0	0				
476	Vertical Enhancer Gain for Y/G [YVEG0_P0]	NTSC/PAL(-except RF)		15	-	8				
477	[YVEG1_P0]	HD2/HD3/HD9/HD10		15	-	12				
478	[YVEG2_P0]	HD1/HD4/HD5/HD6/HD7/HD8		15	-	8				
479	AS[YVEG3_P0]	PAL1-RF / Multi picture		15	-	8				
480	EU[YVEG0_E_P0]	PAL1-RF / Multi picture		15	-	8				
481	Vertical DSB Gain For Y/G [YVDSBG0_P0]	NTSC/ PAL / Multi picture		3	-	0				
482	[YVDSBG1_P0]	HD2/HD3/HD9/HD10		3	-	0				
483	[YVDSBG2_P0]	HD1/HD4/HD5/HD6/HD7/HD8		3	-	0				
484	Vertical DSB Coring for Y/G [YVDSBG0_P0]	NTSC/ PAL / Multi picture		7	-	0				
485	[YVDSBG1_P0]	HD		7	-	3				
486	Vertical Enhancer Clip for Y/G 0:LTI [YVECLP0_P0]	NTSC/ PAL / Multi picture		1	-	1				
487	[YVECLP1_P0]	HD		1	-	1				
488	Vertical Clip Offset Level [YVECLP0_P0]	NTSC/ PAL / Multi picture		15	-	7				
489	[YVECLP1_P0]	HD		15	-	1				
490	Vertical Non Linear Peaking for Y/G [YVNLP0_P0]	NTSC/ PAL / Multi picture		63	-	0				
491	[YVNLP1_P0]	HD		63	-	0				
492	Horizontal HPF Peak Freq. SW for Y/G [YHHPF0_P0]	NTSC/ PAL / Multi picture		3	-	2				
493	[YHHPF1_P0]	HD2/HD3/HD9/HD10		3	-	1				
494	[YHHPF2_P0]	HD1/HD4/HD5/HD6/HD7/HD8		3	-	1				
495	Horizontal Enhancer Gain for Y/G [YHEG0_P0]	NTSC/PAL(-except RF)		15	-	15				
496	[YHEG1_P0]	HD2/HD3/HD9/HD10		15	-	15				
497	[YHEG2_P0]	HD1/HD4/HD5/HD6/HD7/HD8		15	-	0				
498	AS[YHEG3_P0]	PAL1-RF / Multi picture		15	-	15				
499	EU[YHEG0_E_P0]	PAL1-RF / Multi picture		15	-	15				
500	Horizontal DSB Gain For Y/G [YHDSBG0_P0]	NTSC/ PAL / Multi picture		3	-	2				
501	[YHDSBG1_P0]	HD2/HD3/HD9/HD10		3	-	0				
502	[YHDSBG2_P0]	HD1/HD4/HD5/HD6/HD7/HD8		3	-	0				
503	Horizontal DSB Coring for Y/G [YHDSBC0_P0]	NTSC/ PAL / Multi picture		7	-	4				
504	[YHDSBC1_P0]	HD		7	-	0				
505	Horizontal Enhancer Clip for Y/G 0:LTI [YHECLP0_P0]	NTSC/ PAL / Multi picture		1	-	0				
506	[YHECLP1_P0]	HD		1	-	0				
507	Horizontal Clip Offset Level for Y/G AS[YHECLPL0_P0]	RF / Multi picture		15	-	2				
508	AS[YHECLPL1_P0]	NT1-except RF / PAL1-except RF		15	-	2				
509	[YHECLPL2_P0]	HD		15	-	1				
510	EU[YHECLPL0_E_P0]	RF / Multi picture		15	-	4				
511	EU[YHECLPL1_E_P0]	NT1-except RF / PAL1-except RF		15	-	4				
512	Horizontal Non Linear Peaking for Y/G [YHNLP0_P0]	NTSC/ PAL / Multi picture		63	-	0				
513	[YHNLP1_P0]	HD		63	-	0				
514	Coring Amplitude for Y/G [YCOR0_PO]	NT1-RF/ PAL1-RF / Multi picture		7	-	7				
515	[YCOR1_PO]	NT1-Video / PAL1-Video		7	-	5				
516	[YCOR2_PO]	NT2/NT3/NT4/PAL2/PAL3/PAL4		7	-	3				
517	[YCOR3_PO]	HD2/HD3/HD9/HD10		7	-	1				
518	[YCOR4_PO]	HD1/HD4/HD5/HD6/HD7/HD8		7	-	1				
519	Vertical Enhancer Gain for Y/G [YVEG0_P1]	NTSC/PAL(-except RF)		15	8	-				
520	[YVEG1_P1]	HD2/HD3/HD9/HD10		15	12	-				
521	[YVEG2_P1]	HD1/HD4/HD5/HD6/HD7/HD8		15	8	-				
522	AS[YVEG3_P1]	PAL1-RF / Multi picture		15	8	-				
523	EU[YVEG0_E_P1]	PAL1-RF / Multi picture		15	8	-				
524	Vertical DSB Gain for Y/G [YVDSBG0_P1]	NTSC/ PAL / Multi picture		3	0	-				
525	[YVDSBG1_P1]	HD2/HD3/HD9/HD10		3	0	-				
526	[YVDSBG2_P1]	HD1/HD4/HD5/HD6/HD7/HD8		3	0	-				
527	Vertical DSB Coring for Y/G [YVDSBC0_P1]	NTSC/ PAL / Multi picture		7	0	-				
528	[YVDSBC1_P1]	HD		7	3	-				
529	Vertical Enhancer Clip for Y/G 0:LTI [YVECLP0_P1]	NTSC/ PAL / Multi picture		1	1	-				
530	[YVECLP1_P1]	HD		1	1	-				
531	Vertical Clip Offset Level for Y/G [YVECLP0_P1]	NTSC/ PAL / Multi picture		15	7	-				
532	[YVECLP1_P1]	HD		15	1	-				
533	Vertical Non Linear Peaking for Y/G [YVNLP0_P1]	NTSC/ PAL / Multi picture		63	0	-				

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ADJ. No.	Function			Maximum Value	Default		Changed Component			
	Adjustment Items	Mode			32"	42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
534	[YVNLP1_P1]	HD		63	0	-				
535	Horizontal HPF Peak Freq. SW for Y/G [YHHPF0_P1]	NTSC/ PAL / Multi picture		3	2	-				
536	[YHHPF1_P1]	HD2/HD3/HD9/HD10		3	1	-				
537	[YHHPF2_P1]	HD1/HD4/HD5/HD6/HD7/HD8		3	1	-				
538	Horizontal Enhancer Gain for Y/G [YHEG0_P1]	NTSC/PAL(-except RF)		15	15	-				
539	[YHEG1_P1]	HD2/HD3/HD9/HD10		15	15	-				
540	[YHEG2_P1]	HD1/HD4/HD5/HD6/HD7/HD8		15	15	-				
541	AS[YHEG3_P1]	PAL1-RF / Multi picture		15	15	-				
542	EU[YHEG0_E_P1]	PAL1-RF / Multi picture		15	15	-				
543	Horizontal DSB Gain for Y/G [YHDSBG0_P1]	NTSC/ PAL / Multi picture		3	2	-				
544	[YHDSBG1_P1]	HD2/HD3/HD9/HD10		3	0	-				
545	[YHDSBG2_P1]	HD1/HD4/HD5/HD6/HD7/HD8		3	0	-				
546	Horizontal DSB Coring for Y/G [YHDSBC0_P1]	NTSC/ PAL / Multi picture		7	7	-				
547	[YHDSBC1_P1]	HD		7	0	-				
548	Horizontal Enhancer Clip for Y/G 0:LTI [YHDSBC0_P1]	NTSC/ PAL / Multi picture		1	0	-				
549	[YHDSBC1_P1]	HD		1	0	-				
550	Horizontal Clip Offset Level for Y/G AS[YHCLPL0_P1]	RF / Multi picture		15	1	-				
551	AS[YHCLPL1_P1]	NT1-except RF/PAL1-except RF		15	1	-				
552	[YHECLPL2_P1]	HD		15	0	-				
553	EU[YHECLPL0_E_P1]	RF / Multi picture		15	4	-				
554	EU[YHECLPL1_E_P1]	NT1-except RF/PAL1-except RF		15	4	-				
555	Horizontal Non Linear Peaking for Y/G [YHNLP0_P1]	NTSC/ PAL / Multi picture		63	0	-				
556	[YHNLP1_P1]	HD		63	0	-				
557	Coring Amplitude for Y/G [YC0R0_P1]	NT1-RF/PAL1-RF / Multi picture		7	7	-				
558	[YC0R1_P1]	NT1-Video/PAL1-Video		7	5	-				
559	[YC0R2_P1]	NT2/NT3/NT4/PAL2/PAL3/PAL4		7	3	-				
560	[YC0R3_P1]	HD2/HD3/HD9/HD10		7	1	-				
561	[YC0R4_P1]	HD1/HD4/HD5/HD6/HD7/HD8		7	1	-				
562	Vertical Enhancer Gain for B-Y/B, R-Y/R [CVEG0]	NTSC/ PAL / Multi picture		15	15	15				
563	[CVEG1]	HD		15	9	9				
564	Vertical DSB Gain for B-Y/B, R-Y/R [CVDSBG0]	NTSC/ PAL / Multi picture		3	0	0				
565	[CVDSBG1]	HD		3	0	0				
566	Vertical DSB Coring for B-Y/B, R-Y/R [CVDSBC0]	NTSC/ PAL / Multi picture		7	0	0				
567	[CVDSBC1]	HD		7	0	0				
568	Vertical Enhancer Clip for B-Y/B, R-Y/R 0:CTI [CVECLP0]	NTSC/ PAL / Multi picture		1	0	0				
569	[CVECLP1]	HD		1	0	0				
570	Horizontal HPF Peak Freq. SW for B-Y/B, R-Y/R [CHHPF0]	NTSC/ PAL / Multi picture		3	2	2				
571	[CHHPF1]	HD		3	2	2				
572	Horizontal Enhancer Gain for B-Y/B, R-Y/R [CHEG0]	NTSC/ PAL / Multi picture		15	15	15				
573	[CHEG1]	HD		15	9	9				
574	Horizontal DSB Gain for B-Y/B, R-Y/R [CHDSBG0]	NTSC/ PAL / Multi picture		3	0	0				
575	[CHDSBG1]	HD		3	0	0				
576	Horizontal DSB Coring for B-Y/B, R-Y/R [CHDSBC0]	NTSC/ PAL / Multi picture		7	0	0				
577	[CHDSBC1]	HD		7	0	0				
578	Horizontal Enhancer Clip for B-Y/B, R-Y/R 0:CTI [CHECLP0]	NTSC/ PAL / Multi picture		1	0	0				
579	[CHECLP1]	HD		1	0	0				
580	Coring Amplitude for B-Y/B, R-Y/R [CC0R0]	NTSC/ PAL / Multi picture		7	1	1				
581	[CC0R1]	HD		7	1	1				
582	B-Y Clamp offset [Except D Sub Component]	NT1/2/3,HD2/3,PAL1/2/3,HD9/10		255	128	128				
583	R-Y Clamp offset [Except D Sub Component]	NT1/2/3,HD2/3,PAL1/2/3,HD9/10		255	128	128				
584	B-Y Clamp offset [Except D Sub Component]	HD1/4,HD7/8		255	128	128				
585	R-Y Clamp offset [Except D Sub Component]	HD1/4,HD7/8		255	128	128				
586	B-Y Clamp offset [Except D Sub Component]	HD5/6		255	128	128				
587	R-Y Clamp offset [Except D Sub Component]	HD5/6		255	128	128				
588	B-Y Clamp offset [D Sub Component]	NT1/2/3,HD2/3,PAL1/2/3,HD9/10		255	128	128				
589	R-Y Clamp offset [D Sub Component]	NT1/2/3,HD2/3,PAL1/2/3,HD9/10		255	128	128				
590	B-Y Clamp offset [D Sub Component]	HD1/4,HD7/8		255	128	128				
591	R-Y Clamp offset [D Sub Component]	HD1/4,HD7/8		255	128	128				
592	B-Y Clamp offset [D Sub Component]	HD5/6		255	128	128				
593	R-Y Clamp offset [D Sub Component]	HD5/6		255	128	128				
594	B-Y Clamp offset [DVI-STB]	480i/576i/480p/576p/VGA		255	128	128				
595	R-Y Clamp offset [DVI-STB]	480i/576i/480p/576p/VGA		255	128	128				
596	B-Y Clamp offset [DVI-STB]	1080i-50/1080i-60		255	128	128				
597	R-Y Clamp offset [DVI-STB]	1080i-50/1080i-60		255	128	128				
598	B-Y Clamp offset [DVI-STB]	720p-60		255	128	128				
599	R-Y Clamp offset [DVI-STB]	720p-60		255	128	128				
600	Y OUT LEVEL M (4.5) For Asia	Main		63	15	15				
601	Y OUT LEVEL B/G (5.5) For Asia	Main		63	13	13				
602	Y OUT LEVEL D/K (6.5) For Asia	Main		63	16	16				
603	Y OUT LEVEL I (6.0) For Asia	Main		63	14	14				
604	Y OUT LEVEL B/G (5.5) For Europe	Main		63	13	13				
605	Y OUT LEVEL D/K (6.5) For Europe	Main		63	16	16				
606	Y OUT LEVEL I (6.0) For Europe	Main		63	19	19				
607	Y OUT LEVEL L (6.5) For Europe	Main		63	13	13				
608	Y OUT LEVEL L' (6.1) For Europe	Main		63	12	12				
609	Y OUT LEVEL M (4.5) For US	Main		63	13	13				
610	C OUT LEVEL M (4.5) For Asia	Main		63	13	13				
611	C OUT LEVEL B/G (5.5) For Asia	Main		63	13	13				
612	C OUT LEVEL D/K (6.5) For Asia	Main		63	13	13				
613	C OUT LEVEL I (6.0) For Asia	Main		63	13	13				
614	C OUT LEVEL B/G (5.5) For Europe	Main		63	8	8				
615	C OUT LEVEL D/K (6.5) For Europe	Main		63	8	8				
616	C OUT LEVEL I (6.0) For Europe	Main		63	3	3				
617	C OUT LEVEL L (6.5) For Europe	Main		63	8	8				
618	C OUT LEVEL L' (6.1) For Europe	Main		63	8	8				
619	C OUT LEVEL M (4.5) For US	Main		63	13	13				
620	Y OUT LEVEL M (4.5) For Asia	Sub		63	14	14				
621	Y OUT LEVEL B/G (5.5) For Asia	Sub		63	13	13				
622	Y OUT LEVEL D/K (6.5) For Asia	Sub		63	15	15				

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ADJ.	Function		Maximum Value	Default		Changed Component			
No.	Adjustment Items	Mode		32"	42"	FORMATTER PWB	VIDEO PWB	TUNER PWB	PDP Panel
623	Y OUT LEVEL I (6.0) For Asia	Sub	63	13	13				
624	Y OUT LEVEL B/G (5.5) For Europe	Sub	63	13	13				
625	Y OUT LEVEL D/K (6.5) For Europe	Sub	63	16	16				
626	Y OUT LEVEL I (6.0) For Europe	Sub	63	20	20				
627	Y OUT LEVEL L (6.5) For Europe	Sub	63	13	13				
628	Y OUT LEVEL L' (6.1) For Europe	Sub	63	13	13				
629	Y OUT LEVEL M (4.5) For US	Sub	63	13	13				
630	C OUT LEVEL M (4.5) For Asia	Sub	63	13	13				
631	C OUT LEVEL B/G (5.5) For Asia	Sub	63	13	13				
632	C OUT LEVEL D/K (6.5) For Asia	Sub	63	13	13				
633	C OUT LEVEL I (6.0) For Asia	Sub	63	13	13				
634	C OUT LEVEL B/G (5.5) For Europe	Sub	63	13	13				
635	C OUT LEVEL D/K (6.5) For Europe	Sub	63	13	13				
636	C OUT LEVEL I (6.0) For Europe	Sub	63	13	13				
637	C OUT LEVEL L (6.5) For Europe	Sub	63	13	13				
638	C OUT LEVEL L' (6.1) For Europe	Sub	63	13	13				
639	C OUT LEVEL M (4.5) For US	Sub	63	13	13				
640	Contrast Center (CM)	DVI-PC	254	128	128				
641	Contrast Center (CM)	DVI-STB (With Setup)	254	149	149				
642	Contrast Center (CM)	DVI-STB (Without Setup)	254	128	128				
643	Contrast Center (CM)	DSUB-RGB	254	128	128				
644	Contrast Center (CM)	Expand DSUB-RGB (Reserved)	254	128	128				
645	Contrast Center (CM)	DSUB-COMP	254	137	137				
646	Brightness Center (CM)	DVI-PC	254	128	128				
647	Brightness Center (CM)	DVI-STB	254	128	128				
648	Brightness Center (CM)	DSUB-RGB	254	128	128				
649	Brightness Center (CM)	Expand DSUB-RGB (Reserved)	254	128	128				
650	Brightness Center Offset	DSUB-COMP	254	127	127				
651	Color Center (CM)	DVI-PC	127	77	77				
652	Color Center (CM)	DVI-STB (480i/576i/480p/576p)	127	77	77				
653	Color Center (CM)	DVI-STB (720p-60/1080i-60/1080i-50	127	77	77				
654	Color Center (CM)	DVI-STB (VGA)	127	77	77				
655	Color Center (CM)	DSUB-RGB	127	77	77				
656	Tint Center (CM)	DVI-PC	254	128	128				
657	Tint Center (CM)	DVI-STB (480i/576i/480p/576p)	254	128	128				
658	Tint Center (CM)	DVI-STB (720p-60/1080i-60/1080i-50	254	128	128				
659	Tint Center (CM)	DVI-STB (VGA)	254	128	128				
660	Tint Center (CM)	DSUB-RGB	254	128	128				
661	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (480i/576i)	31	3	3				
662	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (480p/576p)	31	2	2				
663	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (720p-60)	31	2	2				
664	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (1080i-60/1080i-50)	31	2	2				
665	Center of Sharpness (HV Enhance Gain for Y)	DVI-STB (VGA)	31	2	2				
666	DVI-STB Setup 0:None VGA/Others Yes, 1:All none 2:All have	DVI-STB mode	2	0	0				
667	HSYNC De-Jitter 0:Low (Disabled), 1:(High (Enabled)	DVI-PC	1	0	0				
668	HSYNC De-Jitter 0:Low (Disabled), 1:(High (Enabled)	DVI-STB	1	0	0				
669	HSYNC De-Jitter 0:Low (Disabled), 1:(High (Enabled)	AVC	1	0	0				
670	Horizontal Clip Offset Level for Y/G AS[YHECLPL3_P0]	NT2～4/PAL2～4	15	-	10				
671	EU[YHECLPL3_E_P0]	NT2～4/PAL2～4	15	-	10				
672	Horizontal Clip Offset Level for Y/G AS[YHCLPL3_P1]	NT2～4/PAL2～4	15	2	-				
673	EU[YHECLPL3_E_P1]	NT2～4/PAL2～4	15	5	-				
674	Y_DL (4.5MHz) For US	Main	10	7	7				
675	Y_DL (4.6MHz) For US	Sub	10	7	7				
676	Y_DL (5.5MHz PAL/NTSC4.43) For Europe	Main	10	4	4				
677	Y_DL (5.5MHz SECAM) For Europe	Main	10	1	1				
678	Y_DL (6.0PAL/NTSC4.43) For Europe	Main	10	8	8				
679	Y_DL (6.0SECAM) For Europe	Main	10	5	5				
680	Y_DL (5.5MHz PAL/NTSC4.43) For Europe	Sub	10	2	2				
681	Y_DL (5.5MHz SECAM) For Europe	Sub	10	0	0				
682	Y_DL (6.0PAL/NTSC4.43) For Europe	Sub	10	4	4				
683	Y_DL (6.0SECAM) For Europe	Sub	10	0	0				
684	Y_DL (6.5MHz PAL/NTSC4.43) For Europe	Main	10	5	5				
685	Y_DL (6.5MHz SECAM) For Europe	Main	10	5	5				
686	Y_DL (6.5MHz PAL/NTSC4.43) For Europe	Sub	10	2	2				
687	Y_DL (6.5MHz SECAM) For Europe	Sub	10	0	0				
688	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	TV	31	19	19				
689	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	VIDEO	31	24	24				
690	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	HD5/HD6	31	11	11				
691	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	HD1/HD4/HD7/HD8	31	7	7				
692	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	HD2/HD3/HD9/HD10	31	15	15				
693	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	NT2/NT3/PAL2/PAL3/NT4/PAL4	31	9	9				
694	Center of Sharpness (HV Enhancer Gain for Y) For Asia/US	TEXT(2 picture)	31	15	15				
695	Contrast mode SW (TV-Dynamic) 0:Dynamic 1:Dynamic+Auto	TV	1	0	0				
696	V detection(FORMATTER PWB) 0:out of range 128:NO V (or out of spec.) 255:interrupt	50/60Hz	255						
697	H detection(FORMATTER PWB) 0:out of range 128:NO H (or out of spec.) 255:interrupt	15/28/31/33/45kHz	255						
698	V detection(VIDEO PWB) 0:out of range 128:NO V 255:interrupt	50/60Hz	255						
699	H detection(VIDEO PWB) 0:out of range 128:NO H 255:interrupt	15/28/31/33/45kHz	255						
700	RGB Amp.Gain Adjustment (FLAON)	Main	-	-	-	○			○
701	RGB Amp.Gain Adjustment	Sub	-	-	-	○			○
702	Automatic White Peak Adj. (Single Picture)	Single Picture mode	-	-	-	○			○
703	Automatic White Peak Adj. (Multi Picture)	Multi Picture mode	-	-	-	○			○
704	EEPROM Initialize (0:No, 1:Yes)		1	0	0				
705	Adjustment Menu of FC4		-	-	-				

● The Expression of input signal mode (format)

PAL1: RF, S and Composite of PAL/SECAM
PAL2: Component of PAL (YCBCR)
PAL3: Component of PAL (YPBPR)
PAL4: Component of PAL (YCBCR-SCART)
PAL: PAL1-4
NT1: S and Composite of NTSC
NT2: Component of NTSC (YCBCR)
NT3: Component of NTSC (YPBPR)
NT4: Component of NTSC (YCBCR-SCART)
NTSC: NTSC1-4
HD1-6: Component (shown in the table→)
HD7: Component of 1080i/50 (YPBPR)
HD8: Component of 1080i/50 (YCBCR)
HD9: Component of 576p (YPBPR)
HD10: Component of 576p (YCBCR)
HD: HD1-10 of Component
TV: NTSC / HD
PC: PC signal

Video Input	System	Judgment of H.Frequency	Video Input Setup	Mode
AV1 AV2	PAL	15.75kHz (576i)	Auto	PAL2
			SDTV/DVD	PAL2
			HDTV	PAL3
	NTSC	15.75kHz (480i)	Auto	NT2
			SDTV/DVD	NT2
			HDTV	NT3
	PAL	31.25kHz (576p)	Auto	HD10
			SDTV/DVD	HD10
			HDTV	HD9
	NTSC	31.50kHz (480p)	Auto	HD3
			SDTV/DVD	HD3
			HDTV	HD2
	NTSC	45.00kHz (720p)	Auto	HD5
			SDTV/DVD	HD6
			HDTV	HD5
	PAL	28.125kHz (1080i)	Auto	HD7
			SDTV/DVD	HD8
			HDTV	HD7
	NTSC	33.75kHz (1080i)	Auto	HD1
			SDTV/DVD	HD4
			HDTV	HD1

● Factory Reset

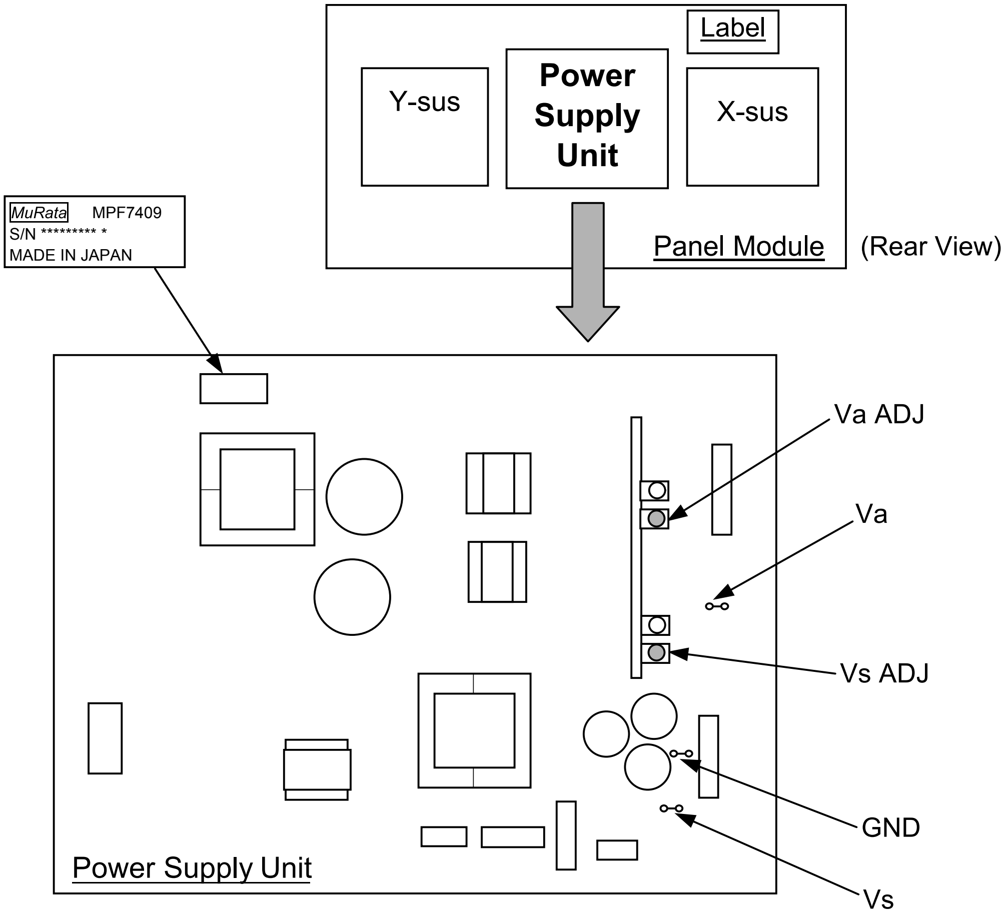
After all of the adjustments of main chassis are finished, perform FACTORY RESET.

Press the SUB-POWER(⏻|) button, INPUT SELECT(⇥) button and ▲ button at the same time, and hold for more than 5 seconds.

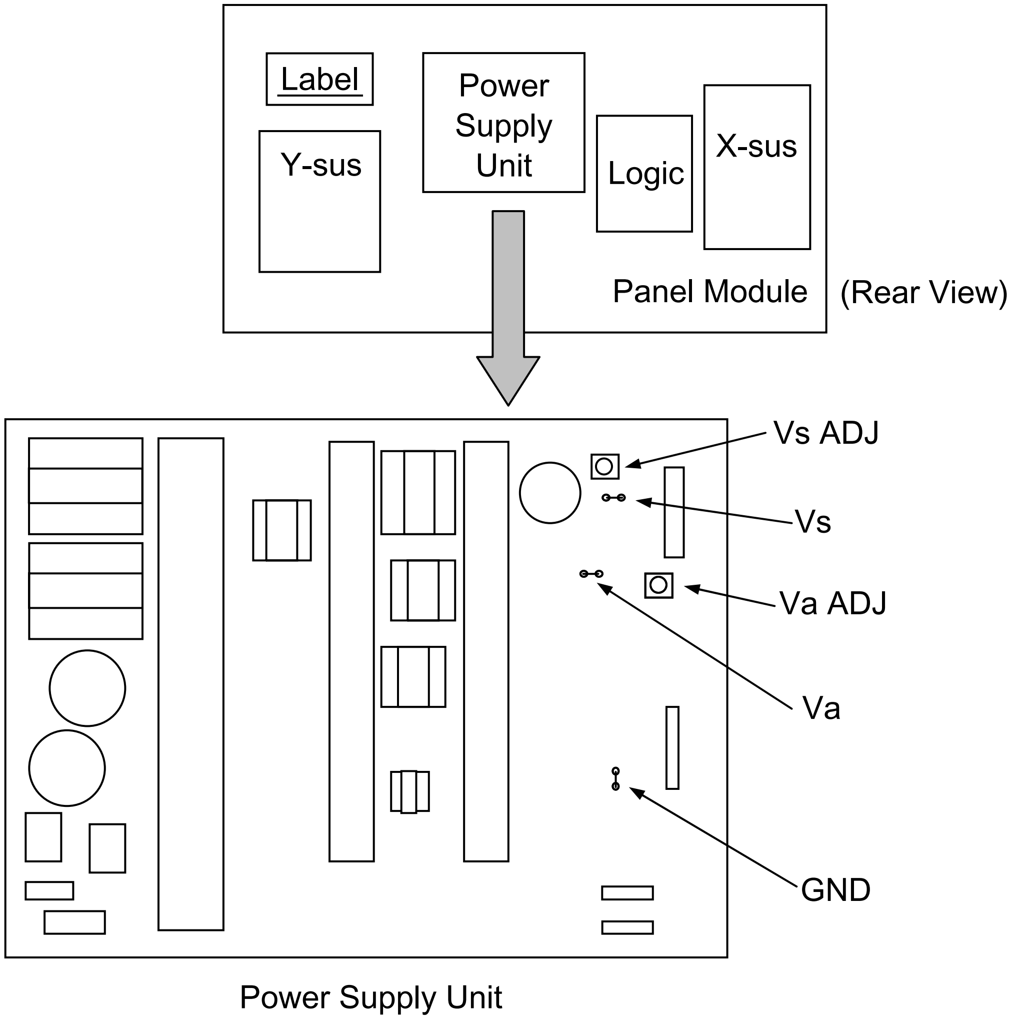
The unit is set to factory settings.

Item	Vs and Va VOLTAGE ADJUSTMENT
Applicable Model	32PD5000, 37PD5000, 37PD5000

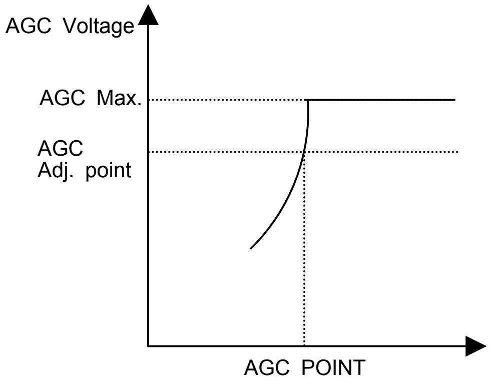
	Preparation		Procedure
(1)	Keep heat-run for 1 minutes or more.	(1)	If the difference between the printed voltage of Vs and the indicated value of Vs Voltmeter is over 0.1V, adjust the Vs ADJ VR located upward on the Power Supply Unit to make it within 0.1V.
(2)	Connect the DC Voltmeter to the Vs test point and the GND point (or the Va test point and the GND point) on the Power Supply Unit.	(2)	If the difference between the printed voltage of Va and the indicated value of Va Voltmeter is over 0.2V, adjust the Va ADJ VR located upward on the Power Supply Unit to make it within 0.2V.
(3)	Receive the all black signal with no setup.	(3)	Check and do the procedure (1) again.
(4)	Check the indication of Vs and Va voltages printed on the label located upper right side on the Panel Module.		<Example of the Voltage Label> <LOT> *************** Vs= 80.0V Va=60.0V Vw=140.0V Vx=60.0V

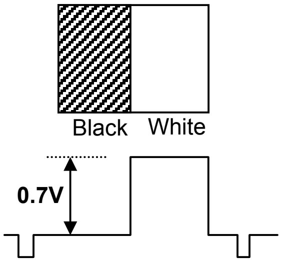

Label
Y-sus
Power Supply Unit
X-sus
Panel Module
(Rear View)
MuRata MPF7409
S/N ********* *
MADE IN JAPAN
Va ADJ
Va
Vs ADJ
GND
Vs
Power Supply Unit

Item	Vs and Va VOLTAGE ADJUSTMENT		
Applicable Model	55PMA500E		
Preparation		Procedure	
(1)	Keep heat-run for 1 minutes or more.	(1)	If the difference between the printed voltage of Vs and the indicated value of Vs Voltmeter is over 0.1V, adjust the Vs ADJ VR located on the Power Supply Unit to make it within 0.1V.
(2)	Connect the DC Voltmeter to the Vs test point and the GND point (or the Va test point and the GND point) on the Power Supply Unit.	(2)	If the difference between the printed voltage of Va and the indicated value of Va Voltmeter is over 0.2V, adjust the Va ADJ VR located on the Power Supply Unit to make it within 0.2V.
(3)	Receive the all black signal with no setup.	(3)	Check and do the procedure (1) again.
(4)	Check the indication of Vs and Va voltages printed on the label located upper left side on the Panel Module.		<Example of the Voltage Label> <LOT> ************** Vs= 82.0V Va=63.0V Vw=180.0V Vx=40.0V

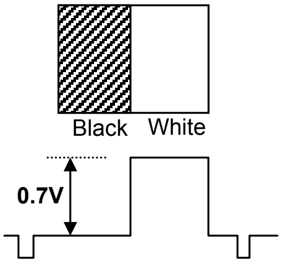

Label
Power Supply Unit
Y-sus
Logic
X-sus
Panel Module
(Rear View)
Vs ADJ
Vs
Va ADJ
Va
GND
Power Supply Unit

Item	AGC ADJUSTMENT
Applicable Model	42PD5200, 32PD5200, 37PD5200

Preparation		Procedure	
(1)	Keep heat-run for 5 minutes or more.	(1)	Enter the service adjustment mode, and indicate No.289 (AGC Adjustment) and No.291 (AGC Input).
(2)	Receive the adjustment signal at ANT terminal. Signal condition CCIR ch-5 (175.25MHz) PAL B/G Philips Pattern Input Field Strength: -50dBm	(2)	Increase the data of No.289 until the data of No.291 converges. (This is the point of AGC-MAX.)
		(3)	Decrease the data of No.289 until the data of No.291 diminishes, and then press the OK button. 

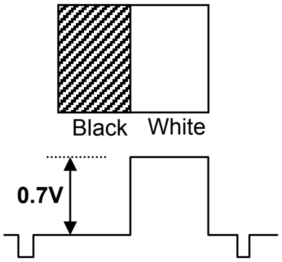
Item	AUTOMATIC SIGNAL LEVEL ADJUSTMENT –RGB (1)
Applicable Model	42PD5100, 42PD5200, 32PD5200, 37PD5200, 55PMA550E
Preparation	Procedure
(1) Input the adjustment signal of VGA (60Hz) format into RGB2 [D-sub] input terminal. the adjustment signal The signal level of black area should be pedestal level. This signal must not be inserted characters etc. 	(1) Select RGB2 and enter the service adjustment mode. (2) Select No.700 “RGB Amp. Gain ADJ.” and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of “AUTO MODE” disappeared.

[Note] Never adjust without use of the specified signal.
If that were done by mistake, the picture would become abnormal in black level, contrast and color.
In this case, it will be recovered by re-adjustment in the specified way.

Item	AUTOMATIC SIGNAL LEVEL ADJUSTMENT –RGB (2)
Applicable Model	42PD5100, 42PD5200, 32PD5200, 37PD5200, 55PMA550E
Preparation	Procedure
(1) Input the adjustment signal of 576p or 480p format into AV1 input terminal. the adjustment signal The signal level of black area should be pedestal level. This signal must not be inserted characters etc. 	(1) Select AV1 and enter the service adjustment mode. (2) Select No.700 “RGB Amp. Gain ADJ.” and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of “AUTO MODE” disappeared. (3) Select No.701 “RGB Amp. Gain ADJ.” and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of “AUTO MODE” disappeared.

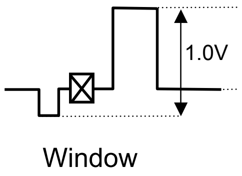
[Note] Never adjust without use of the specified signal.
If that were done by mistake, the picture would become abnormal in black level, contrast and color.
In this case, it will be recovered by re-adjustment in the specified way.

Item	AUTOMATIC SIGNAL LEVEL ADJUSTMENT –VIDEO
Applicable Model	42PD5100, 42PD5200, 32PD5200, 37PD5200, 55PMA550E

Preparation		Procedure	
(1)	Input the adjustment signal of 576p or 480p format into AV1 input terminal. the adjustment signal The signal level of black area should be pedestal level. This signal must not be inserted characters etc. 	(1)	Select AV1 and enter the service adjustment mode.
		(2)	Select No.703 “Automatic White peak Adj. (Multi)” and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of “AUTO MODE” disappeared.

[Note] Never adjust without use of the specified signal.
If that were done by mistake, the picture would become abnormal in black level, contrast and color.
In this case, it will be recovered by re-adjustment in the specified way.

Item	AUTOMATIC SIGNAL LEVEL ADJUSTMENT –TV
Applicable Model	42PD5200, 32PD5200, 37PD5200, 55PMA550E

Preparation		Procedure	
(1)	Input the adjustment signal modulated to RF frequency into ANT terminal. the adjustment signal 	(1)	Select TV channel of the adjustment signal and enter the service adjustment mode.
		(2)	Select No.702 “Automatic White peak Adj. (Single)” and press OK button for more than 2 seconds to start the adjustment. It will complete the adjustment after the OSD of “AUTO MODE” disappeared.

[Note] Never adjust without use of the specified signal.
If that were done by mistake, the picture would become abnormal in black level, contrast and color.
In this case, it will be recovered by re-adjustment in the specified way.

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO
Applicable Model	42PD5100, 42PD5200, 32PD5200,

Preparation Procedure

(1) Set CRT COLOR ANALYZER at the center of the screen panel.

(2) Input the full-white raster signal to AV1 component terminal and select AV1.

Signal condition

480i component
Video level: 0.714Vp-p
Sync level: 0.286Vp-p
Setup level: 0V

(3) Set the display size to "Full".

(This item must be done before the same adjustment for PC mode.)

[Adjustment of Cool mode]

(1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255.

(2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (Cool) for Video
12000K x=0.268±0.005
y=0.283±0.005

[Adjustment of Normal mode]

(3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255.

(4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (Normal) for Video
9300K x=0.285±0.005
y=0.293±0.005

[Adjustment of Warm mode]

(5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255.

(6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (Warm) for Video
6500K x=0.314±0.005
y=0.327±0.005

[Adjustment of Black / White mode]

(7) Enter the service adjustment mode, and confirm that No.9(R), 10(G) and 11(B) are all 255. If the some data are not, set to 255.

(8) Adjust the color temperature by way that reduces the one or two data in No.9, 10 or 11.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (B/W) for Video
5400K x=0.335±0.005
y=0.343±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO
Applicable Model	55PMA500E

Preparation

(This item must be done before the color temperature adjustment for PC mode.)

(1) Set CRT COLOR ANALYZER at the center of the screen panel.

(2) Input the full-white raster signal to AV1 component terminal and select AV1.

Signal condition

480i component
Video level: 0.280Vp-p
Sync level: 0.286Vp-p
Setup level: 0V

(3) Set the display size to "Full".

(4) Change the input signal level to AV1 as below;
Video level: 0.714Vp-p

Procedure

[Adjustment of Cool mode]

(1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255.

(2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (Cool) for Video
15000K x=0.264±0.005
y=0.263±0.005

[Adjustment of Normal mode]

(3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255.

(4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (Normal) for Video
9300K x=0.285±0.005
y=0.293±0.005

[Adjustment of Warm mode]

(5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255.

(6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (Warm) for Video
6500K x=0.314±0.005
y=0.327±0.005

[Adjustment of Black / White mode]

(7) Enter the service adjustment mode, and confirm that No.9(R), 10(G) and 11(B) are all 255. If the some data are not, set to 255.

(8) Adjust the color temperature by way that reduces the one or two data in No.9, 10 or 11.
(Note: At least one of them should be 255 after adjustment.)

<Specification>
Color Temperature (B/W) for Video
5400K x=0.335±0.005
y=0.343±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO
Applicable Model	37PD5200
Preparation	Procedure
(This item must be done before the color temperature adjustment for PC mode.) (1) Set CRT COLOR ANALYZER at the center of the screen panel. (2) Input the full-white raster signal to AV1 component terminal and select AV1. Signal condition 480i component Video level: 0.700Vp-p Sync level: 0.300Vp-p Setup level: 0V (3) Set the display size to “Full”.	[Adjustment of Cool mode] (1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255. (2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Cool) for Video 12000K x=0.268±0.005 y=0.283±0.005 [Adjustment of Normal mode] (3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255. (4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Normal) for Video 9300K x=0.285±0.005 y=0.293±0.005 [Adjustment of Warm mode] (5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255. (6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Warm) for Video 6500K x=0.314±0.005 y=0.327±0.005 [Adjustment of Black / White mode] (7) Enter the service adjustment mode, and confirm that No.9(R), 10(G) and 11(B) are all 255. If the some data are not, set to 255. (8) Adjust the color temperature by way that reduces the one or two data in No.9, 10 or 11. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (B/W) for Video 5400K x=0.335±0.005 y=0.343±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -PC
Applicable Model	42PD5100, 42PD5200, 32PD5200, 37PD5200, 55PMA550E

Preparation	Procedure
	[Adjustment of Cool mode]
(1) Set CRT COLOR ANALYZER at the center of the screen panel.	(1) Enter the service adjustment mode, and confirm that No.12(R), 13(G) and 14(B) are all 255. If the some data are not, set to 255.
(2) Input the full-white raster signal to RGB2 D-sub terminal and select RGB2-RGB. Signal condition VGA (75) Video level: 0.7Vp-p Setup level: 0V	(2) Adjust the color temperature by way that reduces the one or two data in No.12, 13 or 14. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Cool) for PC 12000K x=0.268±0.005 y=0.283±0.005
(3) Set the display area to “Full”. (This item must be done after the same adjustment for VIDEO mode.)	[Adjustment of Normal, Warm, Black/White mode] (3) Set the adjusted value of COLOR TEMP. ADJ. -VIDEO (Normal, Warm, Black/White mode; Adj No. 3, 4, 5, 6, 7, 8, 9, 10, 11) to Adj No. 15, 16, 17, 18, 19, 20, 21, 22, 23. [at VIDEO] [at PC] No. 3 data → No.15 data No. 4 data No.16 data - - - - No.11 data No.23 data <Specification> Color Temperature (Normal) for PC 9300K x=0.285±0.005 y=0.293±0.005 <Specification> Color Temperature (Warm) for PC 6500K x=0.314±0.005 y=0.327±0.005 <Specification> Color Temperature (B/W) for PC 5400K x=0.335±0.005 y=0.343±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO
Applicable Model	42PD5000, 32PD5000

Preparation	Procedure
(1) Connect the AVC jig and set CRT COLOR ANALYZER at the center of the screen panel. (2) Set AVC jig to “Standard” of VIDEO mode, and input the full-white raster signal to component terminal. Signal condition 480i component Video level: 0.714Vp-p Sync level: 0.286Vp-p Setup level: 0V (3) Set the display size to “Full”. (This item must be done before the same adjustment for PC mode.)	[Adjustment of Cool mode] (1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255. (2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Cool) for Video 12000K x=0.268±0.005 y=0.283±0.005 [Adjustment of Normal mode] (3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255. (4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Normal) for Video 9300K x=0.285±0.005 y=0.293±0.005 [Adjustment of Warm mode] (5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255. (6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Warm) for Video 6500K x=0.314±0.005 y=0.327±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -VIDEO
Applicable Model	37PD5200

Preparation	Procedure
(This item must be done before the color temperature adjustment for PC mode.) (1) Connect the AVC jig and set CRT COLOR ANALYZER at the center of the screen panel. (2) Set AVC jig to “Standard” of VIDEO mode, and input the full-white raster signal to component terminal. Signal condition 480i component Video level: 0.700Vp-p Sync level: 0.300Vp-p Setup level: 0V (3) Set the display size to “Full”.	[Adjustment of Cool mode] (1) Enter the service adjustment mode, and confirm that No.0(R), 1(G) and 2(B) are all 255. If the some data are not, set to 255. (2) Adjust the color temperature by way that reduces the one or two data in No.0, 1 or 2. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Cool) for Video 12000K x=0.268±0.005 y=0.283±0.005 [Adjustment of Normal mode] (3) Enter the service adjustment mode, and confirm that No.3(R), 4(G) and 5(B) are all 255. If the some data are not, set to 255. (4) Adjust the color temperature by way that reduces the one or two data in No.3, 4 or 5. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Normal) for Video 9300K x=0.285±0.005 y=0.293±0.005 [Adjustment of Warm mode] (5) Enter the service adjustment mode, and confirm that No.6(R), 7(G) and 8(B) are all 255. If the some data are not, set to 255. (6) Adjust the color temperature by way that reduces the one or two data in No.6, 7 or 8. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Warm) for Video 6500K x=0.314±0.005 y=0.327±0.005

Item	COLOR TEMPERATURE ADJUSTMENT -PC
Applicable Model	42PD5000, 32PD5000, 37PD5200
Preparation	Procedure
(1) Connect the AVC jig and set CRT COLOR ANALYZER at the center of the screen panel.	[Adjustment of Cool mode] (1) Enter the service adjustment mode, and confirm that No.12(R), 13(G) and 14(B) are all 255. If the some data are not, set to 255.
(2) Set AVC jig to “Standard” of PC mode, and input the full-white raster signal to RGB terminal. Signal condition VGA (75) Video level: 0.7Vp-p Setup level: 0V	(2) Adjust the color temperature by way that reduces the one or two data in No.12, 13 or 14. (Note: At least one of them should be 255 after adjustment.) <Specification> Color Temperature (Cool) for PC 12000K x=0.268±0.005 y=0.283±0.005
(3) Set the display area to “Full”. (This item must be done after the same adjustment for VIDEO mode.)	[Adjustment of Normal, Warm, Black/White mode] (3) Set the adjusted value of COLOR TEMP. ADJ. -VIDEO (Normal, Warm, Black/White mode; Adj No. 3, 4, 5, 6, 7, 8) to Adj No. 3, 4, 5, 6, 7, 8. [at VIDEO] [at PC] No.3 data → No.3 data No.4 data No.4 data - - - - No.8 data No.8 data <Specification> Color Temperature (Normal) for PC 9300K x=0.285±0.005 y=0.293±0.005 <Specification> Color Temperature (Warm) for PC 6500K x=0.314±0.005 y=0.327±0.005

7. Troubleshooting

● How to get to Burn-in mode

This mode displays the test patterns of some single color raster in turn. These signals are from built-in generator of PDP panel. So it can be presumed that maybe the panel has some trouble when the screen of Burn-in mode is abnormal.

Using the front control buttons with the set turned off (standby) can activate this mode.

Press the SUB-POWER(⏻) button, INPUT SELECT(⎆) button and VOLUME DOWN(◢) button at the same time, and hold for more than 5 seconds.

The set turns on with single color raster and the OSD of [BURN IN: ON].

To escape from this mode, press the SUB-POWER(⏻) button, INPUT SELECT(⎆) button and ▲ button at the same time, and hold for more than 5 seconds. Burn-in mode will be released.

● How to recover the remote and front key function

If remote and front key cannot operate after miss set special function by front keys, these functions can recover by below method.

Press the SUB-POWER(⏻) button, INPUT SELECT(⎆) button and ▼ button at the same time, and hold for more than 5 seconds.

The set turns on the service menu mode.

Select No.175 and data set from [0] to [1].

Or

Press the SUB-POWER(⏻) button and ▼ button at the same time, and hold for more than 5 seconds

● Forced AVC mode (only for 37PD5200)

This model is set to "Forced AVC" mode. It makes the set cannot be turned on without connecting AVC.

Following procedures should be referred when servicing 42/32PD5200 without AVC box.

Procedure of escaping from this mode (before servicing)

Using the front control buttons with the set turned off (standby) can activate it.

Press the SUB-POWER button and VOLUME▲ button at the same time, and hold for more than 5 seconds.

The set will be changed that the power of the monitor can be turned on without AVC.

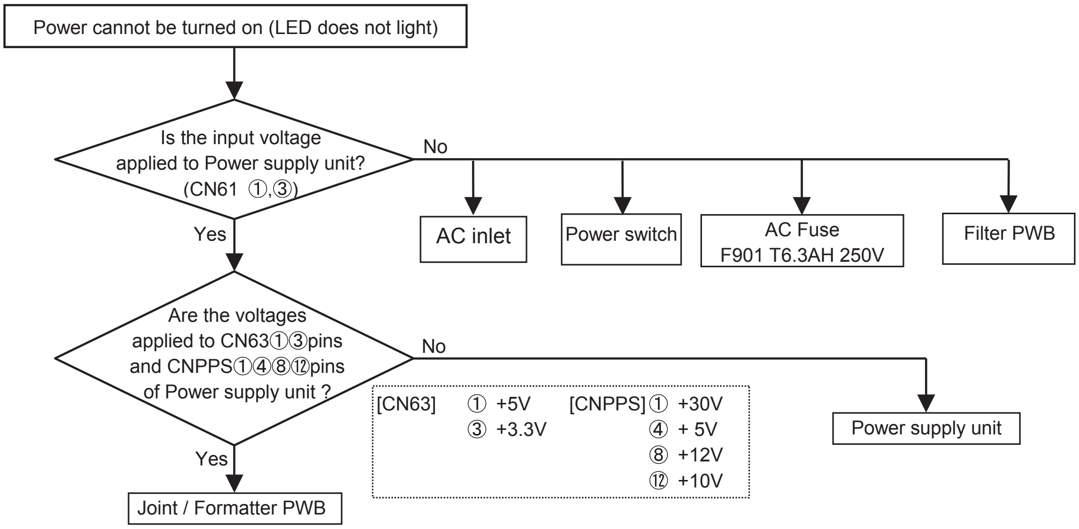
Procedure of getting into this mode again (after servicing)

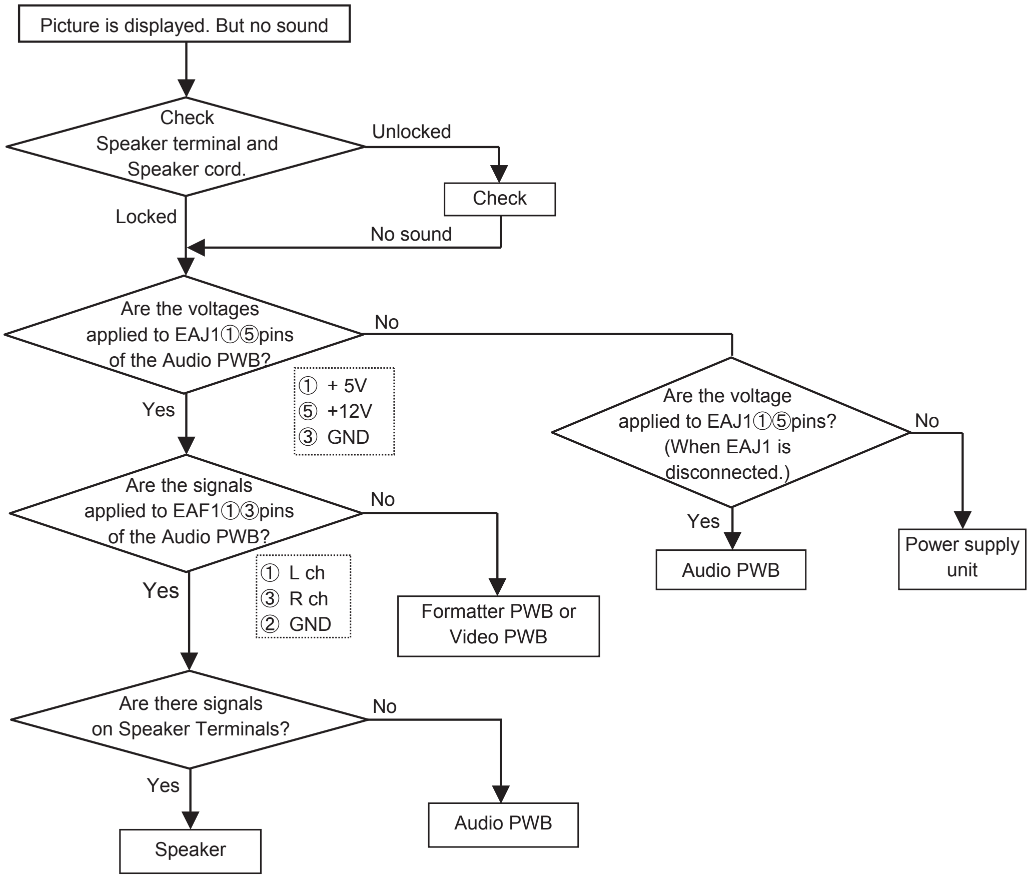
(1) Enter Adjustment Mode.

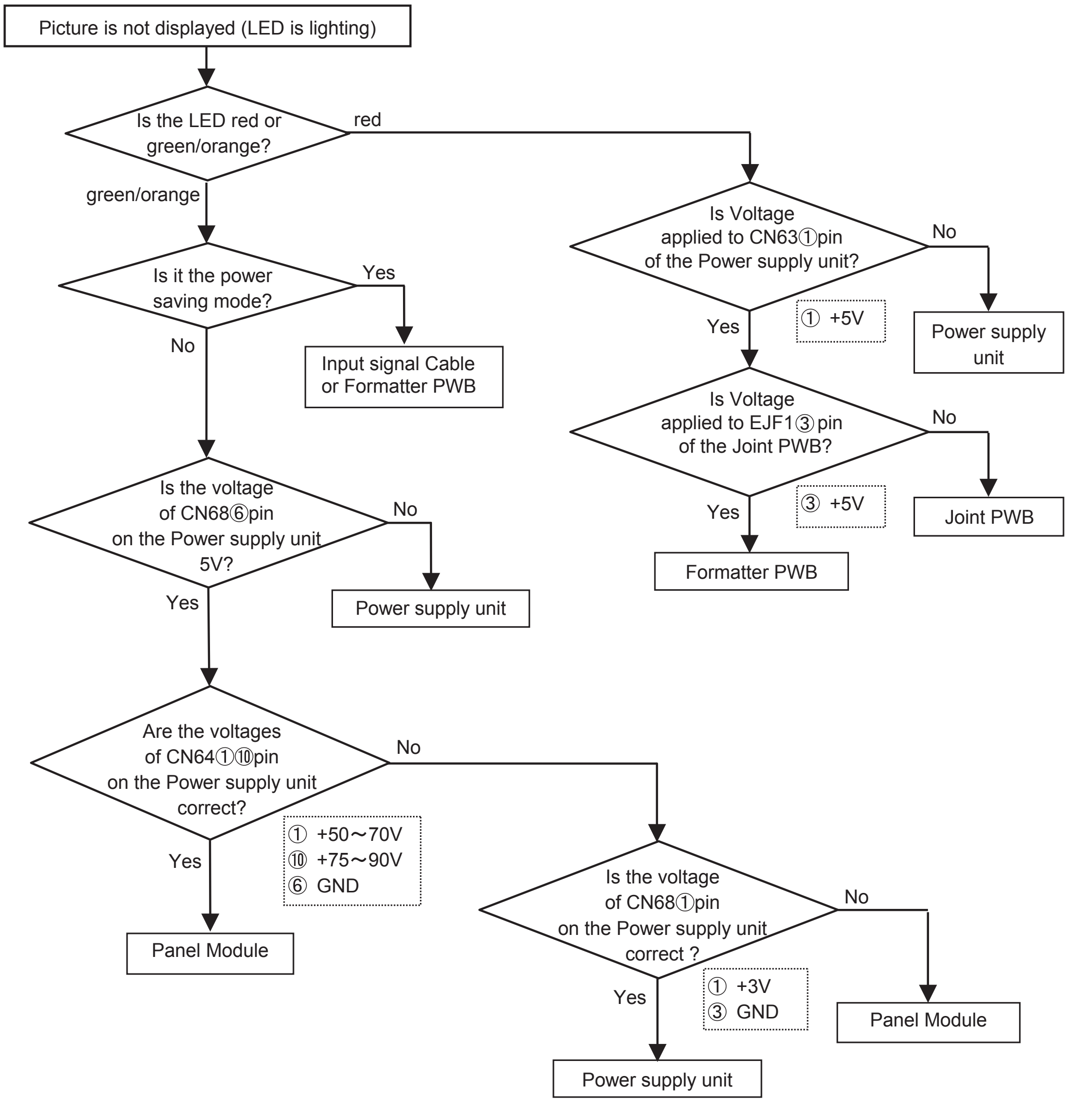
(2) Select adjustment code (No.323) and change the data value from 0 to 1.

The set will be changed again that the power of the monitor cannot be turned on without AVC.

● Troubleshooting (POWER)

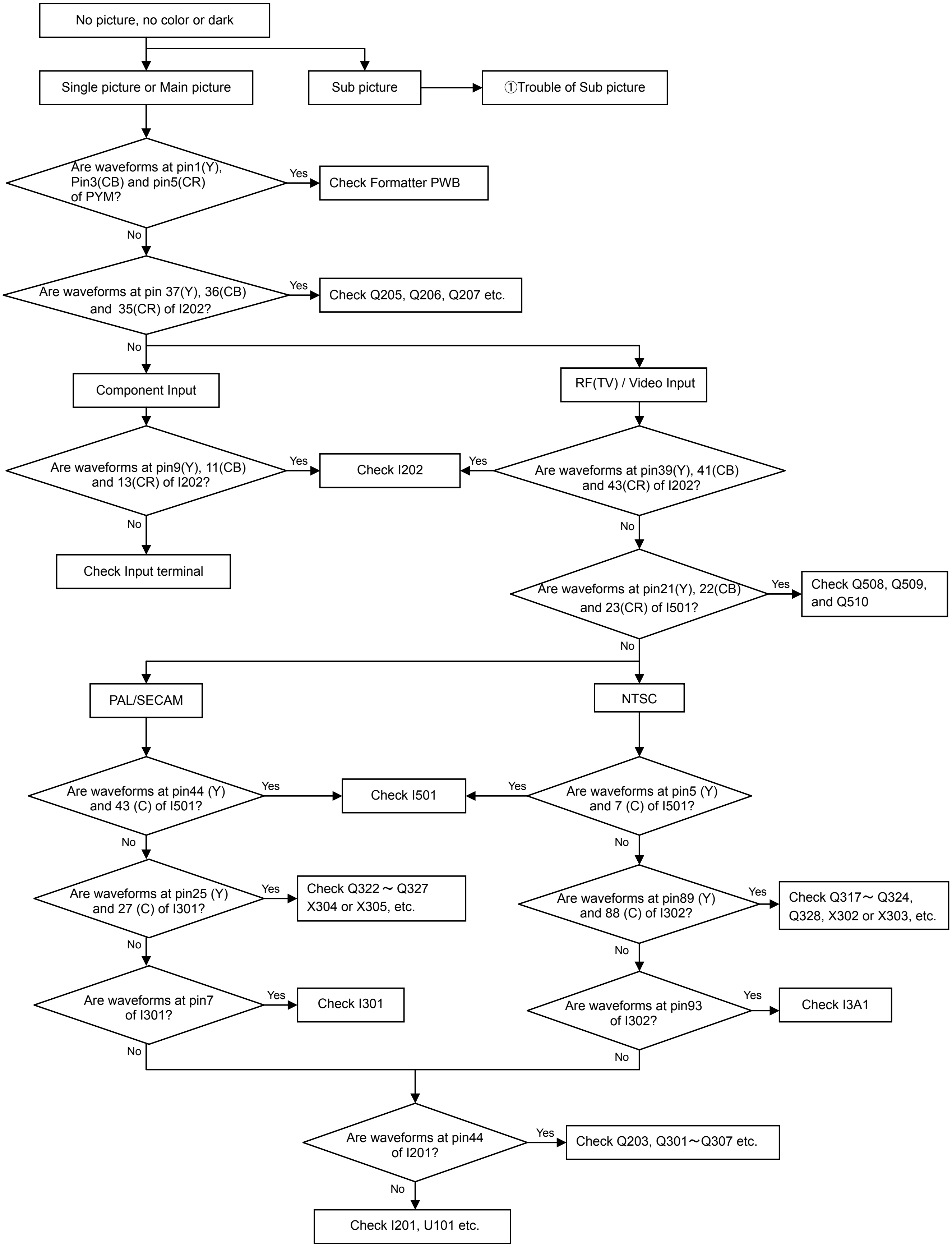

Power cannot be turned on (LED does not light)
Is the input voltage applied to Power supply unit? (CN61 ①,③)
No
AC inlet
Power switch
AC Fuse F901 T6.3AH 250V
Filter PWB
Yes
Are the voltages applied to CN63①③pins and CNPPS①④⑧⑫pins of Power supply unit ?
No
[CN63] ① +5V
③ +3.3V
[CNPPS] ① +30V
④ + 5V
⑧ +12V
⑫ +10V
Power supply unit
Yes
Joint / Formatter PWB

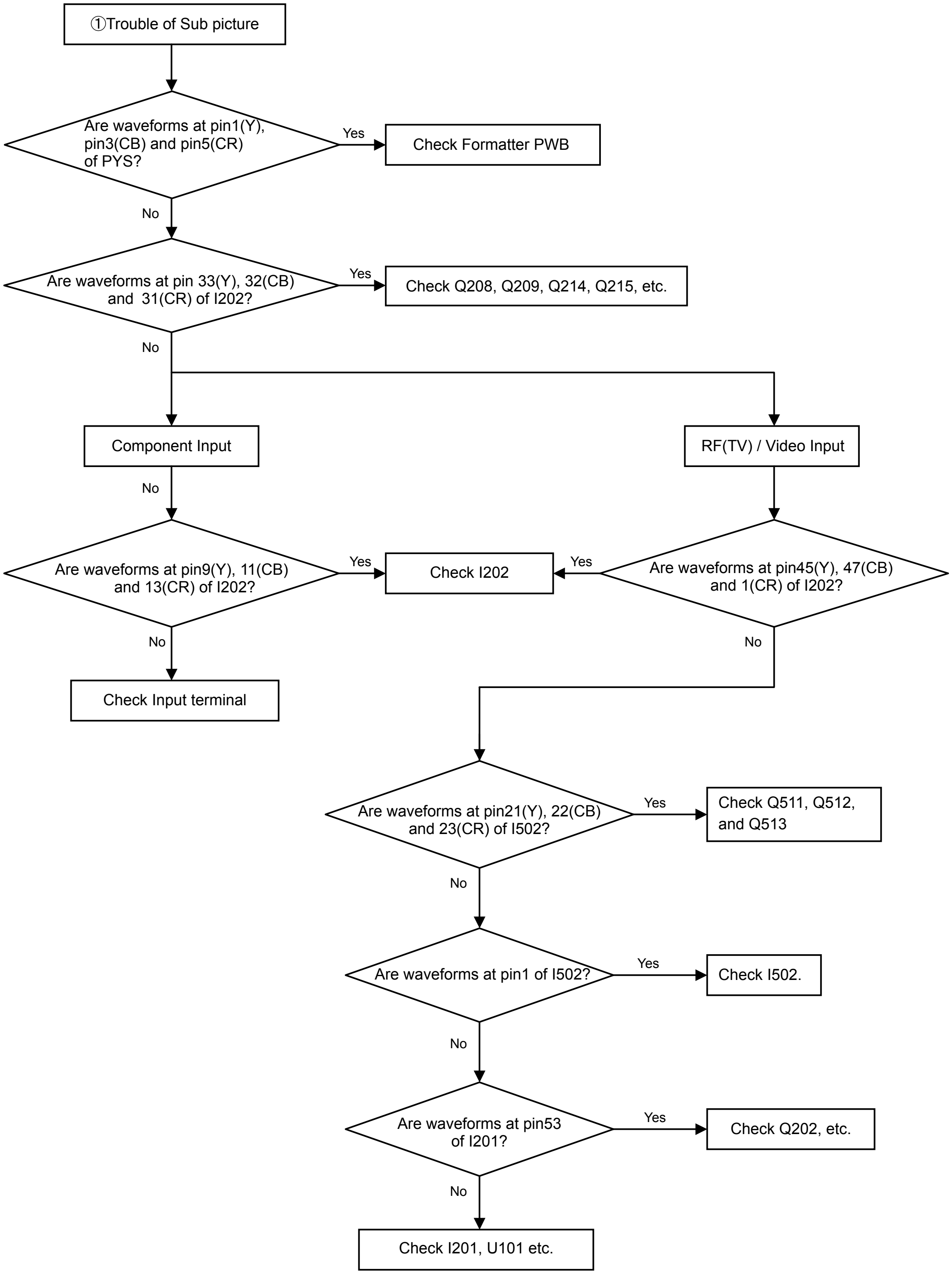

Picture is displayed. But no sound
Check Speaker terminal and Speaker cord.
Unlocked
Check
No sound
Locked
Are the voltages applied to EAJ1①⑤pins of the Audio PWB?
No
① + 5V
⑤ +12V
③ GND
Are the voltage applied to EAJ1①⑤pins? (When EAJ1 is disconnected.)
No
Yes
Audio PWB
Power supply unit
Yes
Are the signals applied to EAF1①③pins of the Audio PWB?
No
① L ch
③ R ch
② GND
Formatter PWB or Video PWB
Yes
Are there signals on Speaker Terminals?
No
Audio PWB
Yes
Speaker


Picture is not displayed (LED is lighting)
Is the LED red or green/orange?
red
green/orange
Is it the power saving mode?
Yes
No
Input signal Cable or Formatter PWB
Is the voltage of CN68⑥pin on the Power supply unit 5V?
No
Power supply unit
Yes
Are the voltages of CN64①⑩pin on the Power supply unit correct?
No
① +50～70V
⑩ +75～90V
⑥ GND
Yes
Panel Module
Is the voltage of CN68①pin on the Power supply unit correct ?
No
① +3V
③ GND
Yes
Power supply unit
Panel Module
Is Voltage applied to CN63①pin of the Power supply unit?
No
① +5V
Yes
Power supply unit
Is Voltage applied to EJF1③pin of the Joint PWB?
No
③ +5V
Yes
Joint PWB
Formatter PWB

● Troubleshooting (PICTURE) .... for 42PD5100MA, 32/37/42PD5200, 55PMA500E

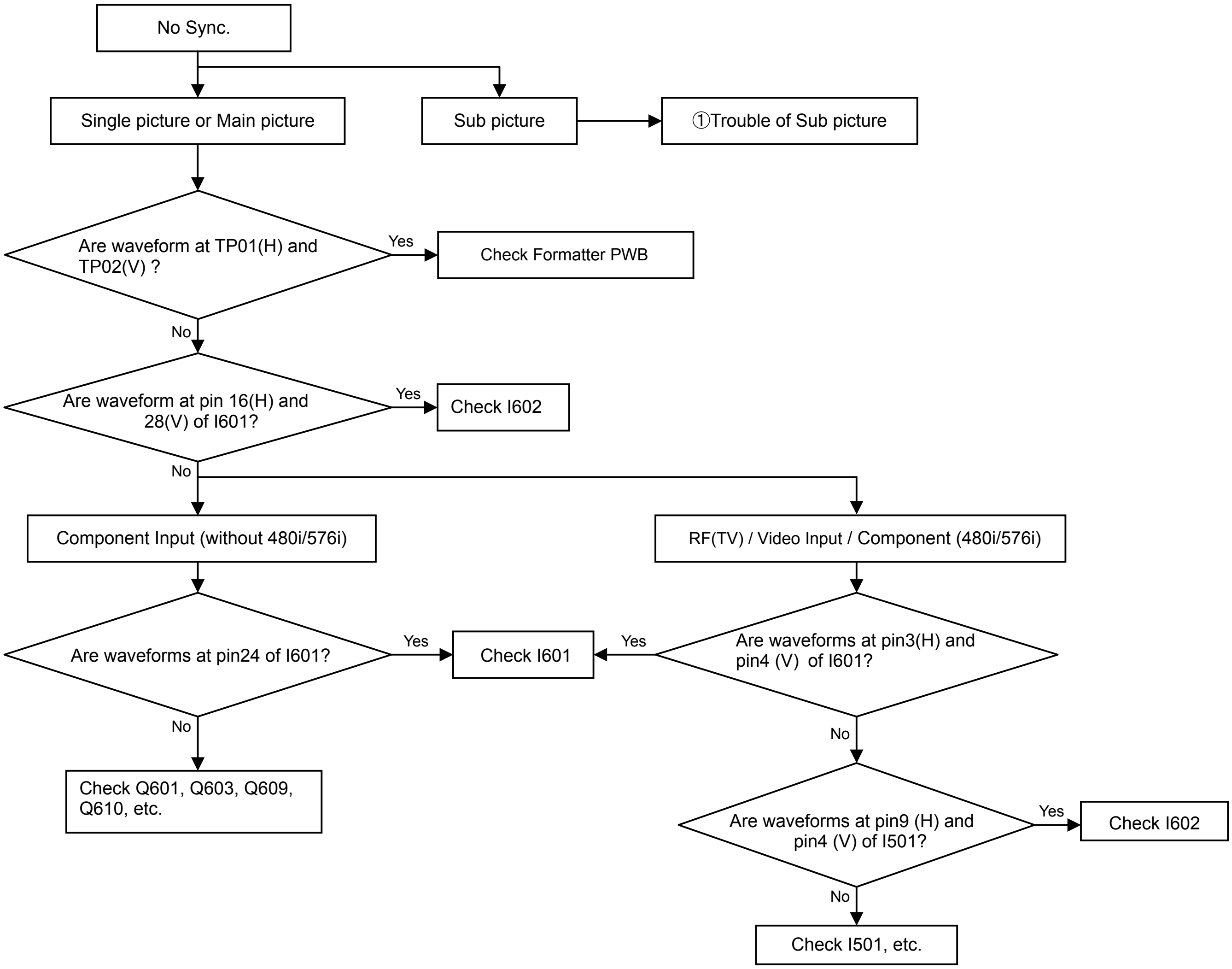
[VIDEO PWB Circuit]

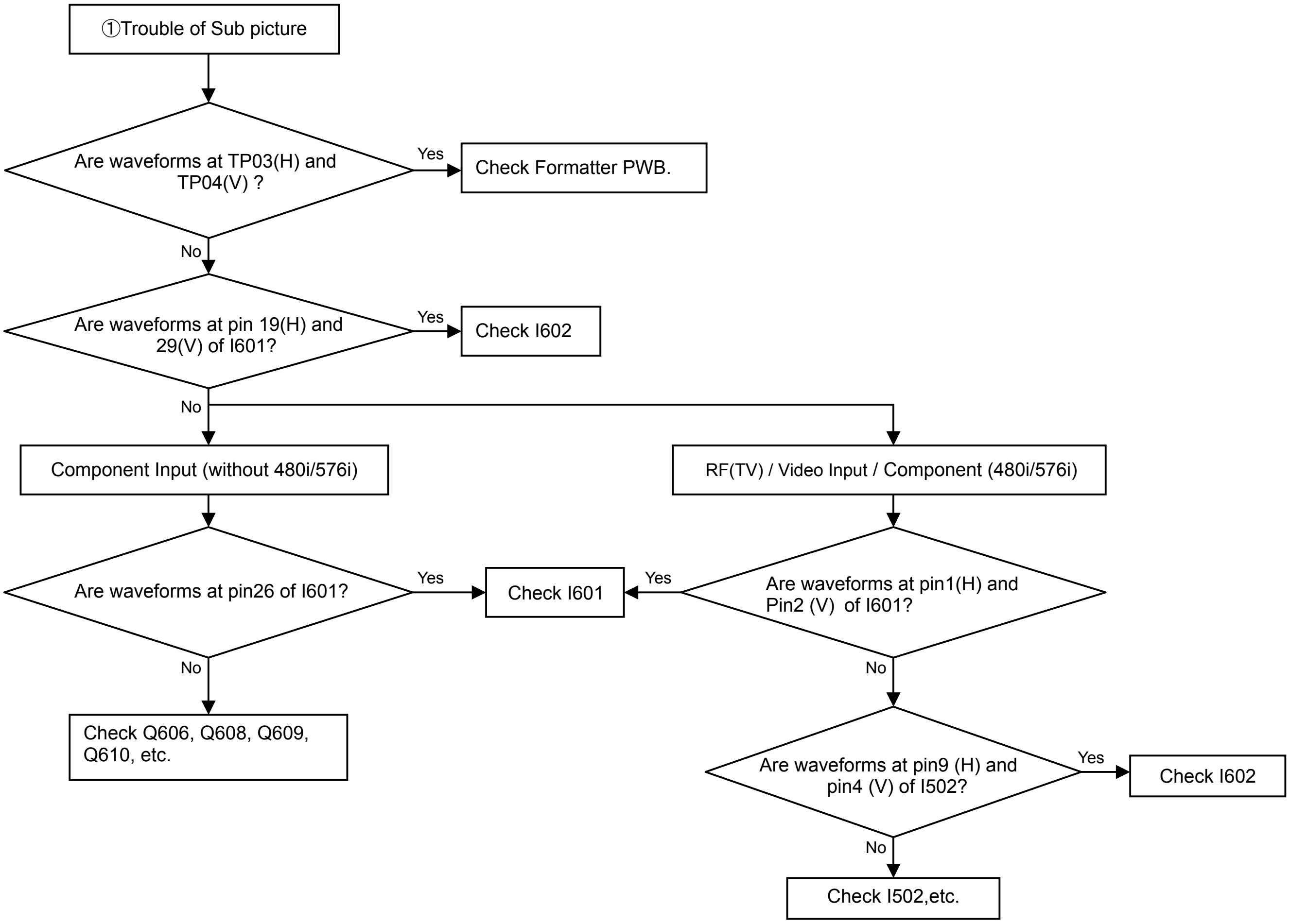

No picture, no color or dark
Single picture or Main picture
Sub picture
①Trouble of Sub picture
Are waveforms at pin1(Y), Pin3(CB) and pin5(CR) of PYM?
Yes
Check Formatter PWB
No
Are waveforms at pin 37(Y), 36(CB) and 35(CR) of I202?
Yes
Check Q205, Q206, Q207 etc.
No
Component Input
RF(TV) / Video Input
Are waveforms at pin9(Y), 11(CB) and 13(CR) of I202?
Yes
Check I202
Yes
Are waveforms at pin39(Y), 41(CB) and 43(CR) of I202?
No
Check Input terminal
No
Are waveforms at pin21(Y), 22(CB) and 23(CR) of I501?
Yes
Check Q508, Q509, and Q510
No
PAL/SECAM
NTSC
Are waveforms at pin44 (Y) and 43 (C) of I501?
Yes
Check I501
Yes
Are waveforms at pin5 (Y) and 7 (C) of I501?
No
Are waveforms at pin25 (Y) and 27 (C) of I301?
Yes
Check Q322～Q327 X304 or X305, etc.
No
Are waveforms at pin89 (Y) and 88 (C) of I302?
Yes
Check Q317～Q324, Q328, X302 or X303, etc.
No
Are waveforms at pin7 of I301?
Yes
Check I301
No
Are waveforms at pin93 of I302?
Yes
Check I3A1
No
Are waveforms at pin44 of I201?
Yes
Check Q203, Q301～Q307 etc.
No
Check I201, U101 etc.


①Trouble of Sub picture
Are waveforms at pin1(Y), pin3(CB) and pin5(CR) of PYS?
Yes
Check Formatter PWB
No
Are waveforms at pin 33(Y), 32(CB) and 31(CR) of I202?
Yes
Check Q208, Q209, Q214, Q215, etc.
No
Component Input
RF(TV) / Video Input
No
Are waveforms at pin9(Y), 11(CB) and 13(CR) of I202?
Yes
Check I202
Yes
Are waveforms at pin45(Y), 47(CB) and 1(CR) of I202?
No
Check Input terminal
No
Are waveforms at pin21(Y), 22(CB) and 23(CR) of I502?
Yes
Check Q511, Q512, and Q513
No
Are waveforms at pin1 of I502?
Yes
Check I502.
No
Are waveforms at pin53 of I201?
Yes
Check Q202, etc.
No
Check I201, U101 etc.

● Trouble Shooting (Synchronization) .... for 42PD5100, 32/3742PD5200, 55PMA500E

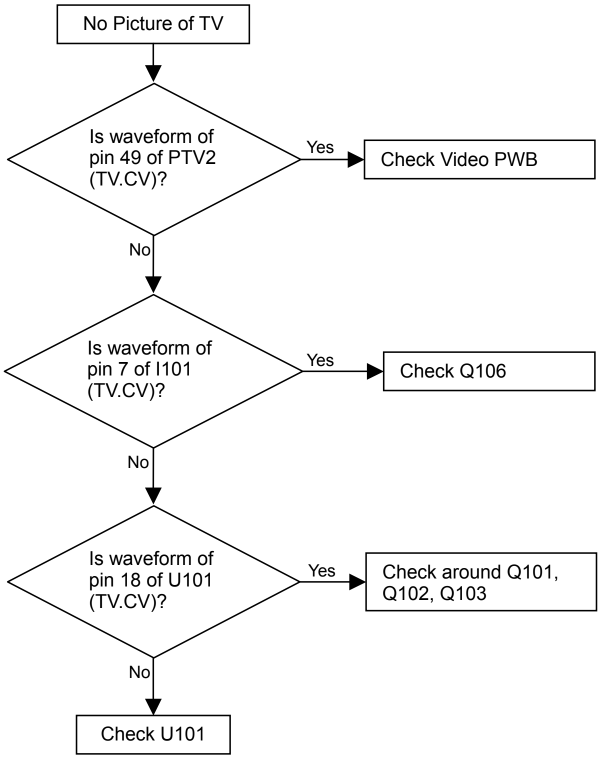
[VIDEO PWB Circuit]

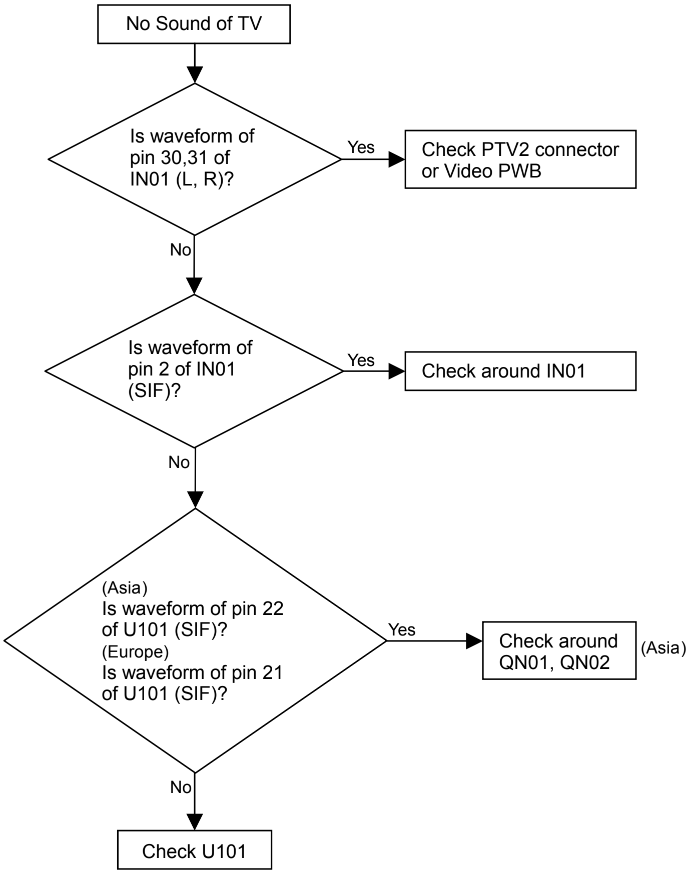

No Sync.
Single picture or Main picture
Sub picture
①Trouble of Sub picture
Are waveform at TP01(H) and TP02(V) ?
Yes
Check Formatter PWB
No
Are waveform at pin 16(H) and 28(V) of I601?
Yes
Check I602
No
Component Input (without 480i/576i)
RF(TV) / Video Input / Component (480i/576i)
Are waveforms at pin24 of I601?
Yes
Check I601
Yes
Are waveforms at pin3(H) and pin4 (V) of I601?
No
Check Q601, Q603, Q609, Q610, etc.
No
Are waveforms at pin9 (H) and pin4 (V) of I501?
Yes
Check I602
No
Check I501, etc.

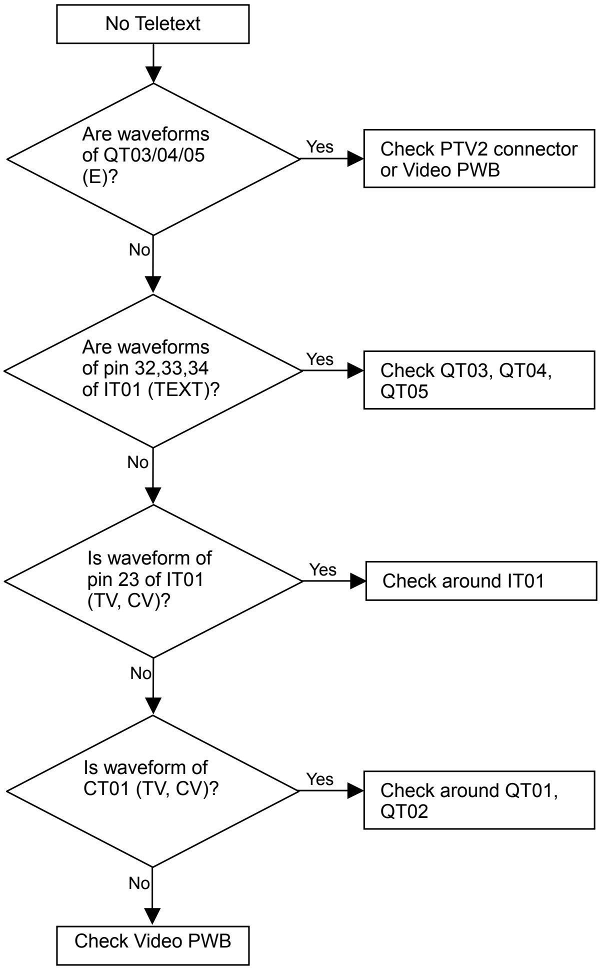

①Trouble of Sub picture
Are waveforms at TP03(H) and TP04(V) ?
Yes
Check Formatter PWB.
No
Are waveforms at pin 19(H) and 29(V) of I601?
Yes
Check I602
No
Component Input (without 480i/576i)
RF(TV) / Video Input / Component (480i/576i)
Are waveforms at pin26 of I601?
Yes
Check I601
Yes
Are waveforms at pin1(H) and Pin2 (V) of I601?
No
Check Q606, Q608, Q609, Q610, etc.
No
Are waveforms at pin9 (H) and pin4 (V) of I502?
Yes
Check I602
No
Check I502,etc.

● Troubleshooting (TV / Teletext) .... for 32/37/42PD5000, 55PMA550E

[TUNER PWB]


No Picture of TV
Is waveform of pin 49 of PTV2 (TV.CV)?
Yes
Check Video PWB
No
Is waveform of pin 7 of I101 (TV.CV)?
Yes
Check Q106
No
Is waveform of pin 18 of U101 (TV.CV)?
Yes
Check around Q101, Q102, Q103
No
Check U101


No Sound of TV
Is waveform of pin 30,31 of IN01 (L, R)?
Yes
Check PTV2 connector or Video PWB
No
Is waveform of pin 2 of IN01 (SIF)?
Yes
Check around IN01
No
(Asia)
Is waveform of pin 22 of U101 (SIF)?
(Europe)
Is waveform of pin 21 of U101 (SIF)?
Yes
Check around QN01, QN02
(Asia)
No
Check U101


No Teletext
Are waveforms of QT03/04/05 (E)?
Yes
Check PTV2 connector or Video PWB
No
Are waveforms of pin 32,33,34 of IT01 (TEXT)?
Yes
Check QT03, QT04, QT05
No
Is waveform of pin 23 of IT01 (TV, CV)?
Yes
Check around IT01
No
Is waveform of CT01 (TV, CV)?
Yes
Check around QT01, QT02
No
Check Video PWB

8. Self-Diagnosis Function

This chassis has 2 modes of self-diagnosis function.

(1) PDP panel check mode: It indicates the one latest record of the PDP panel failure with blinking of the power indication light (LED).

(2) Signal circuit check mode: It indicates the check result on some points of the signal circuit and the history of them with On-Screen Display (OSD).

● PDP panel self-diagnosis function

This function is for a PDP panel failure with no picture.

To enter to this Self-Diagnosis mode, follow the next steps:

Preparation:

1) The Power Cord should be connected to AC line and the Main Power switch should be turned on.
2) Turn the power off by the SUB-POWER(⏻|) button of the monitor or the remote control.

Procedure:

1) Press the SUB-POWER(⏻|) button and ▼ button on the bottom of the monitor at the same time, and keep it for more than 5 seconds after the power turned on.
2) It generates red blinking series of the power indicator light.
3) Any operation would cancel the Self -Diagnosis mode.
4) The next table shows the PDP PWB in which failure most probably would be allocated according to the number of blinks.

Number of red blinks of power indication light	Presumed failing PWB of PDP panel
1	Logic
2	X-SUS
3	Y-SUS, SDM
4	X-SUS, Y-SUS, SDM, PSU
5	ABUS, ADM, PSU
6	ADM temperature
7	ADM temperature
8	All of above-mentioned PWB’s

SDM: Scan Driver Module

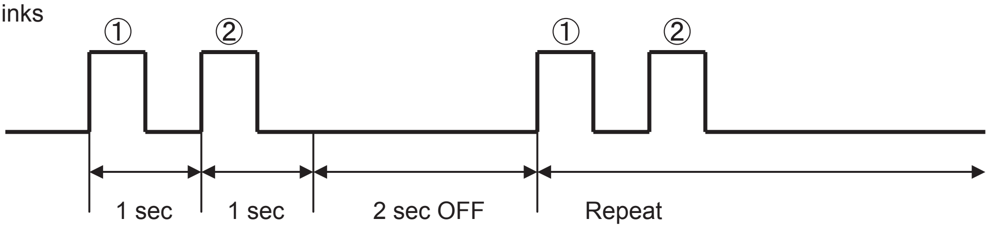
PSU: Power Supply Unit

ADM: Address Driver Module

Note) SDM is permanently contacted to glass part

[Blinking condition of power indication light]

Ex. 2 blinks



● Signal circuit self-diagnosis function

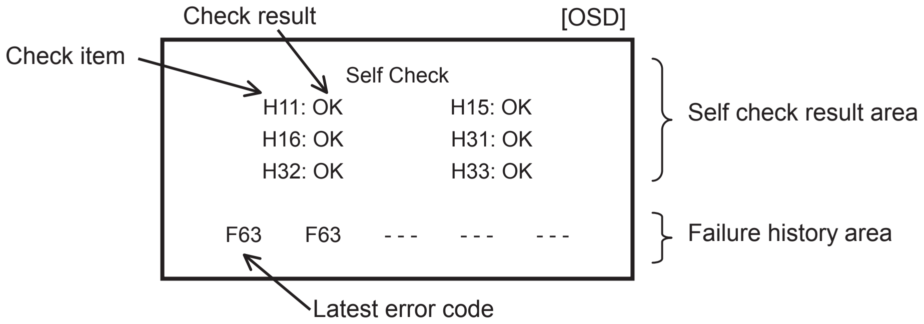
This function is for the failure of the signal circuit, for example the phenomenon as below:
"Sometimes power turns off abnormally." "Sometimes picture disappears abnormally."
To enter to this Self-Diagnosis mode, follow the next steps:

Preparation:

1) The Power Cord should be connected to AC line and the Main Power switch should be turned on.
2) Turn the power off by the SUB-POWER(⏻) button of the monitor or the remote control.

Procedure:

1) Press the SUB-POWER(⏻) button and ▲ button on the bottom of the monitor at the same time, and keep it for more than 5 seconds after the power turned on.
2) The monitor will be turned on, and it will display On-Screen Display of the Self-check result and the failure history as below.
3) Any operation would cancel the Self -Diagnosis mode.
4) The following table shows the OSD symbols and contents of failure PWB in which failure most probably would be allocated according to the number of blinks.



Code	stored up in failure history	Self checking item	Problem	Phenomenon	Cause
C10(*	–	–	No sync. (Snow noise)	OSD of " ! Check Antenna " appears.	No connection of ANT cable Preset tuning is not yet
H11(*	–	○	Tuner problem	Cannot receive the main signal from antenna	Communication error of U101
H15	–	○	Composite video SW IC problem	Cannot receive picture and audio Cannot change input mode	Communication error of I201
H16	–	○	Component video SW IC problem	No component picture Cannot change input mode	Communication error of I202
H31	–	○	Color demodulator IC problem	Abnormal color Dark picture	Communication error of I501
H32	–	○	Sync. separator IC problem	Unsynchronized picture	Communication error of I601
H33	–	○	3D Y/C separator IC problem	Abnormal color Dark picture / No picture	Communication error of I302
H71(*	–	○	T/Text IC problem	No T/Text No picture	Communication error of IT01
H72(*	–	○	Sound MPX IC problem	No sound from antenna Cannot change MPX sound	Communication error of IN01
F63	○	–	I^2C-bus latch problem	Cannot store setting data (Ex. Channel, Volume etc.)	SCL3/SDA3 latched up

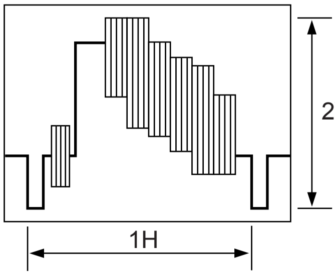
*) This code is no meaning for the models except 32/42PD5000TA because those are without tuner circuit.

If you clear history of failure, make FACTORY RESET: enter the factory setting mode; press the SUB-POWER(⏻) button, INPUT SELECT(⇥) button and ▲ button on the bottom of the monitor at the same time. And keep it for more than 5 seconds after the power turned on.

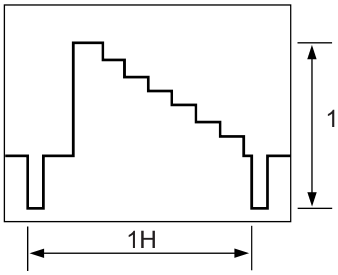
9. Basic circuit diagram

● Waveform

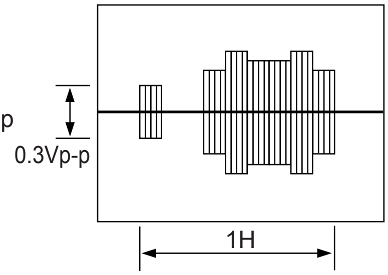
① I201(MAIN.V)(44) PIN
② I201(SUB.V)(53) PIN



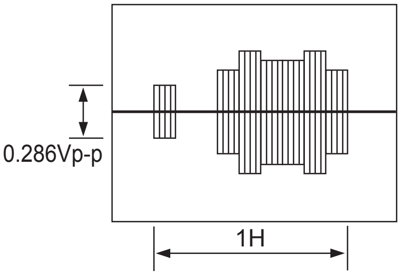
③ I501 YIN(3L)(44) PIN
④ I501 YIN(3D)(5) PIN



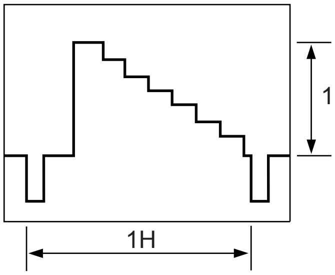
⑤ I501 CIN(3L)(43) PIN



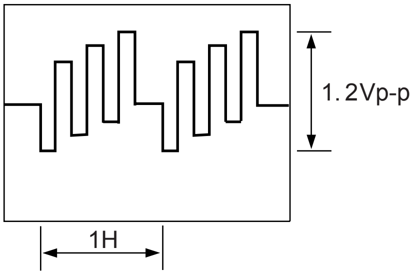
⑥ I501 CIN(3D)(7) PIN



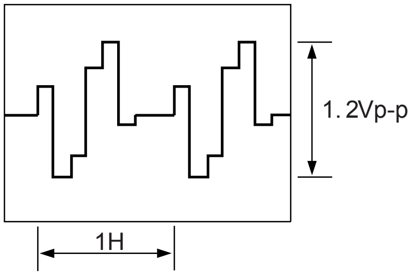
⑦ PYM(MY)(1)PIN
⑧ PYS(SY)(1)PIN



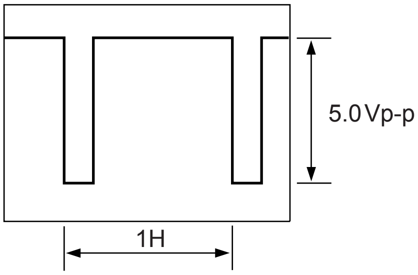
⑨ PYM(MPB)(3)PIN
⑩ PYS(SPB)(3)PIN



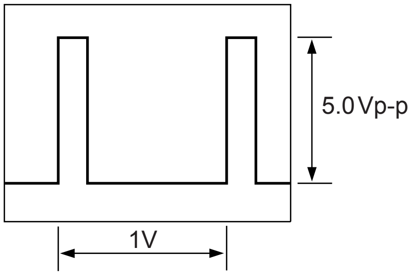
⑪ PYM(MPR)(5)PIN
⑫ PYS(SPR)(5)PIN



⑬ TP01(MH)
⑭ TP03(SH)

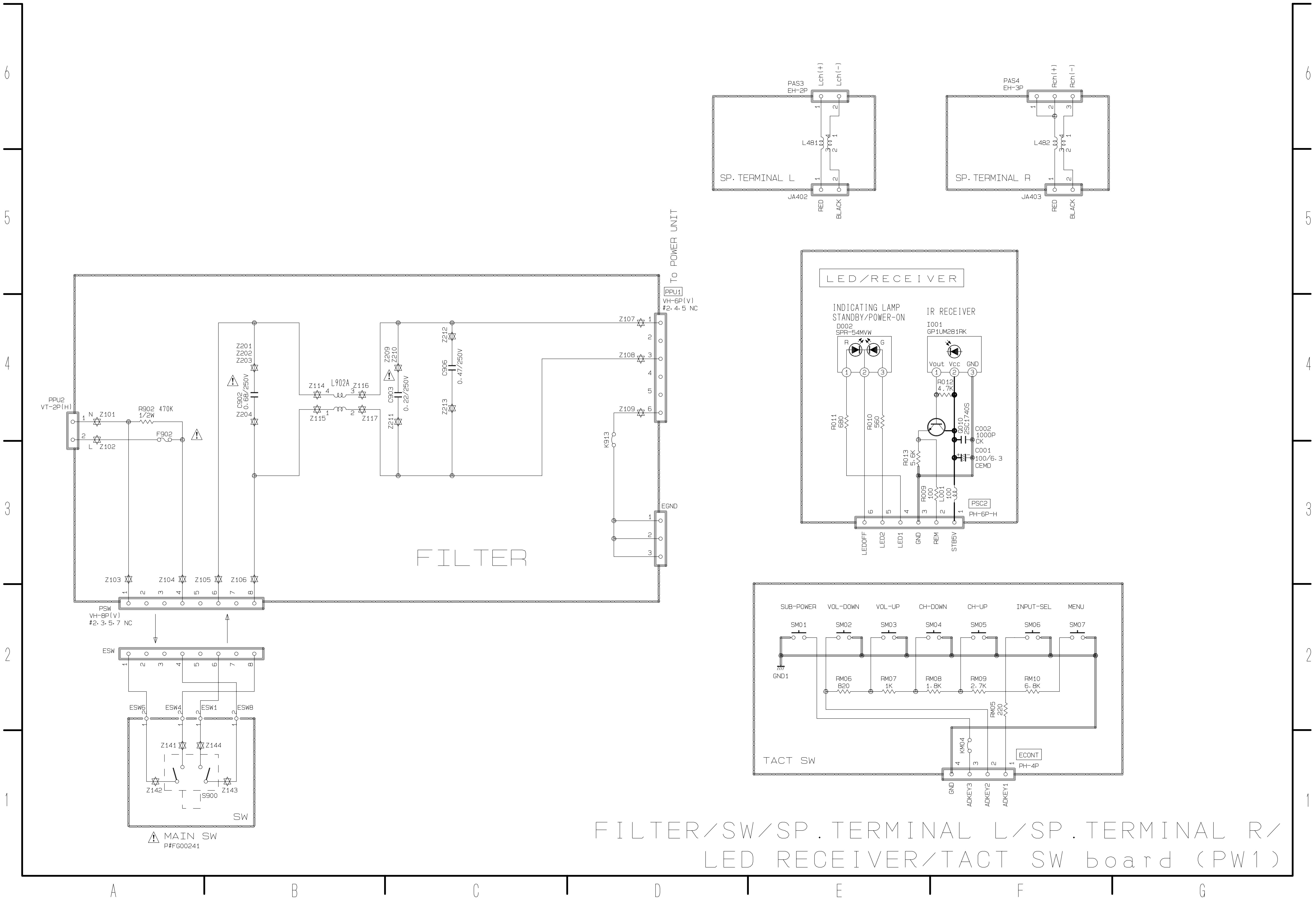


⑮ TP02(MV)
⑯ TP04(SV)

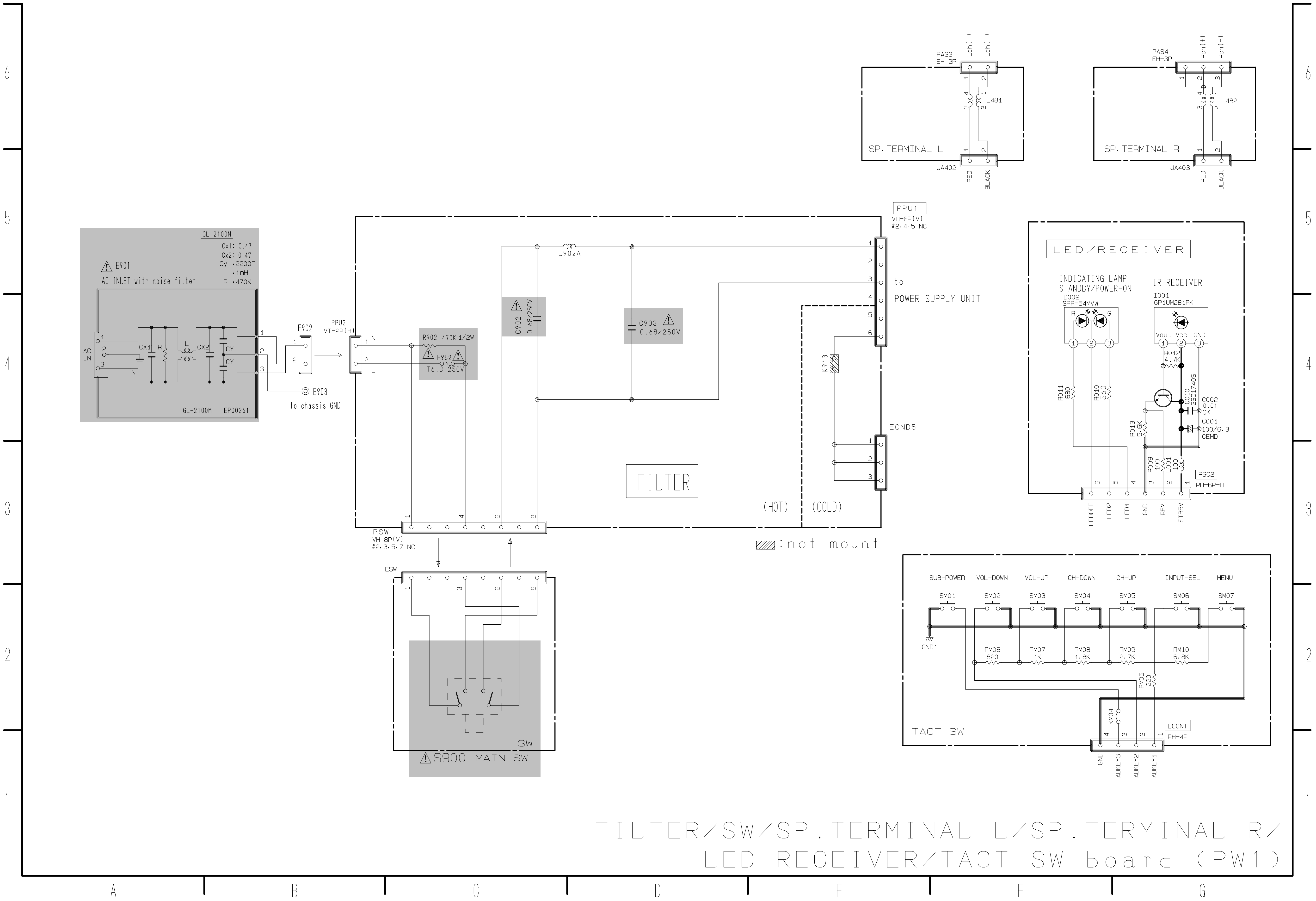


Basic circuit diagram list

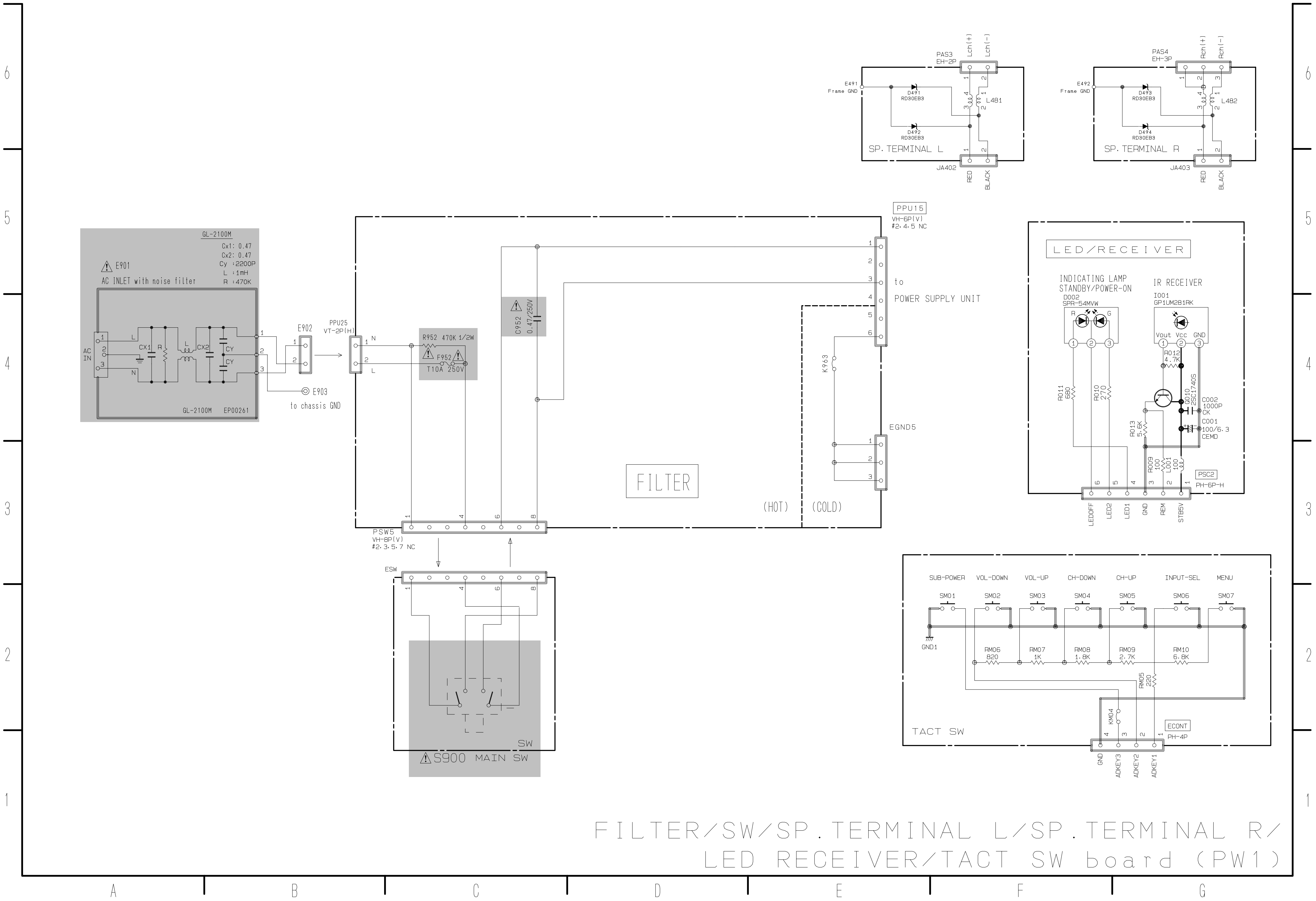
FILTER/SW/SP. TERMINAL L/SP. TERMINAL R/
LED RECEIVER/TACT SW board 49
AUDIO board 52
JOINT board 54
VIDEO board 1 55
VIDEO board 2 56
TUNER board 58


To POWER UNIT
PPU1
VH-6P(V)
#2.4.5 NC
PPU2
VT-2P(H)
N
L
Z101
Z102
R902 470K
1/2W
F902
Z201
Z202
Z203
C902
0.68/250V
Z204
Z114
L902A
Z116
Z115
Z117
Z209
Z210
C903
0.22/250V
Z211
Z212
C906
0.47/250V
Z213
Z107
Z108
Z109
K913
EGND
FILTER
Z103
Z104
Z105
Z106
PSW
VH-8P(V)
#2.3.5.7 NC
ESW
ESW6
ESW4
ESW1
ESW8
Z141
Z144
Z142
Z143
S900
SW
MAIN SW
P#FG00241
PAS3
EH-2P
Lch(+)
Lch(-)
L481
SP. TERMINAL L
JA402
RED
BLACK
PAS4
EH-3P
Rch(+)
Rch(-)
L482
SP. TERMINAL R
JA403
RED
BLACK
LED/RECEIVER
INDICATING LAMP
STANDBY/POWER-ON
D002
SPR-54MVW
R
G
IR RECEIVER
I001
GP1UM281RK
Vout
Vcc
GND
R012
4.7K
R011
680
R010
560
Q010
2SC1740S
C002
1000P
CK
C001
100/6.3
CEMD
R013
5.6K
R009
100
L001
100
PSC2
PH-6P-H
LEDOFF
LED2
LED1
GND
REM
STB5V
SUB-POWER
VOL-DOWN
VOL-UP
CH-DOWN
CH-UP
INPUT-SEL
MENU
SM01
SM02
SM03
SM04
SM05
SM06
SM07
GND1
RM06
820
RM07
1K
RM08
1.8K
RM09
2.7K
RM10
6.8K
RM05
220
KM04
ECONT
PH-4P
TACT SW
GND
ADKEY3
ADKEY2
ADKEY1
A
B
C
D
E
F
G
1
2
3
4
5
6

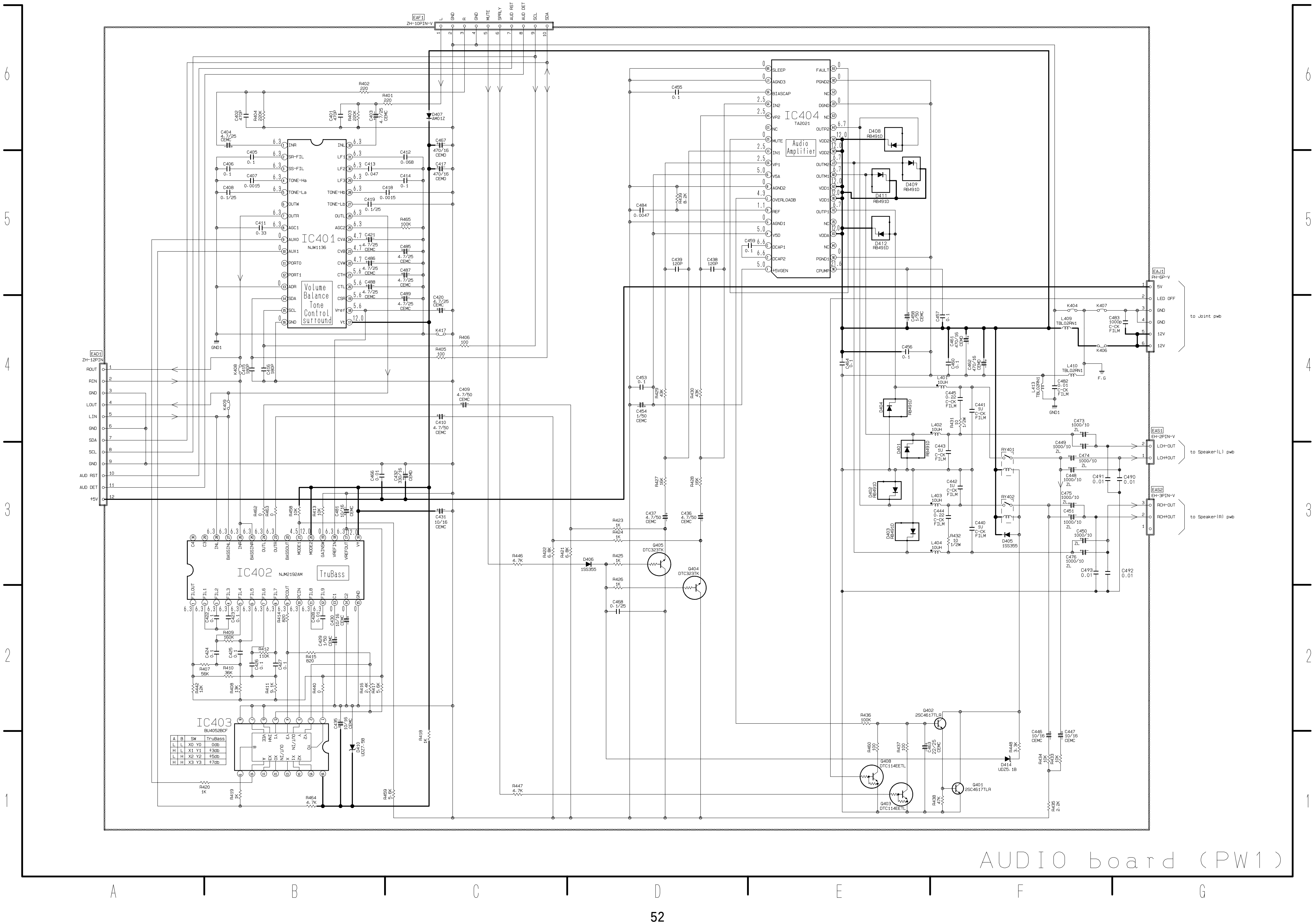
FILTER/SW/SP.TERMINAL L/SP.TERMINAL R/ LED RECEIVER/TACT SW board (PW1)


PAS3
EH-2P
Lch(+)
Lch(-)
L481
SP.TERMINAL L
JA402
RED
BLACK
PAS4
EH-3P
Rch(+)
Rch(-)
L482
SP.TERMINAL R
JA403
RED
BLACK
GL-2100M
Cx1: 0.47
Cx2: 0.47
Cy :2200P
L :1mH
R :470K
E901
AC INLET with noise filter
AC IN
L
N
CX1
R
L
CX2
CY
CY
GL-2100M EP00261
E902
E903
to chassis GND
PPU2
VT-2P(H)
N
L
R902 470K 1/2W
F952
T6.3 250V
C902 0.68/250V
L902A
C903 0.68/250V
K913
PPU1
VH-6P(V)
#2.4.5 NC
to
POWER SUPPLY UNIT
EGND5
FILTER
(HOT)
(COLD)
PSW
VH-8P(V)
#2.3.5.7 NC
▨:not mount
ESW
SW
S900 MAIN SW
LED/RECEIVER
INDICATING LAMP
STANDBY/POWER-ON
D002
SPR-54MVW
R
G
IR RECEIVER
I001
GP1UM281RK
Vout
Vcc
GND
R012 4.7K
Q010 2SC1740S
C002 0.01 CK
C001 100/6.3 CEMD
R011 680
R010 560
R013 5.6K
R009 100
L001 100
PSC2
PH-6P-H
LEDOFF
LED2
LED1
GND
REM
STB5V
SUB-POWER
VOL-DOWN
VOL-UP
CH-DOWN
CH-UP
INPUT-SEL
MENU
SM01
SM02
SM03
SM04
SM05
SM06
SM07
GND1
RM06 820
RM07 1K
RM08 1.8K
RM09 2.7K
RM10 6.8K
RM05 220
KM04
TACT SW
ECONT
PH-4P
GND
ADKEY3
ADKEY2
ADKEY1
A
B
C
D
E
F
G
1
2
3
4
5
6

FILTER/SW/SP.TERMINAL L/SP.TERMINAL R/
LED RECEIVER/TACT SW board (PW1)

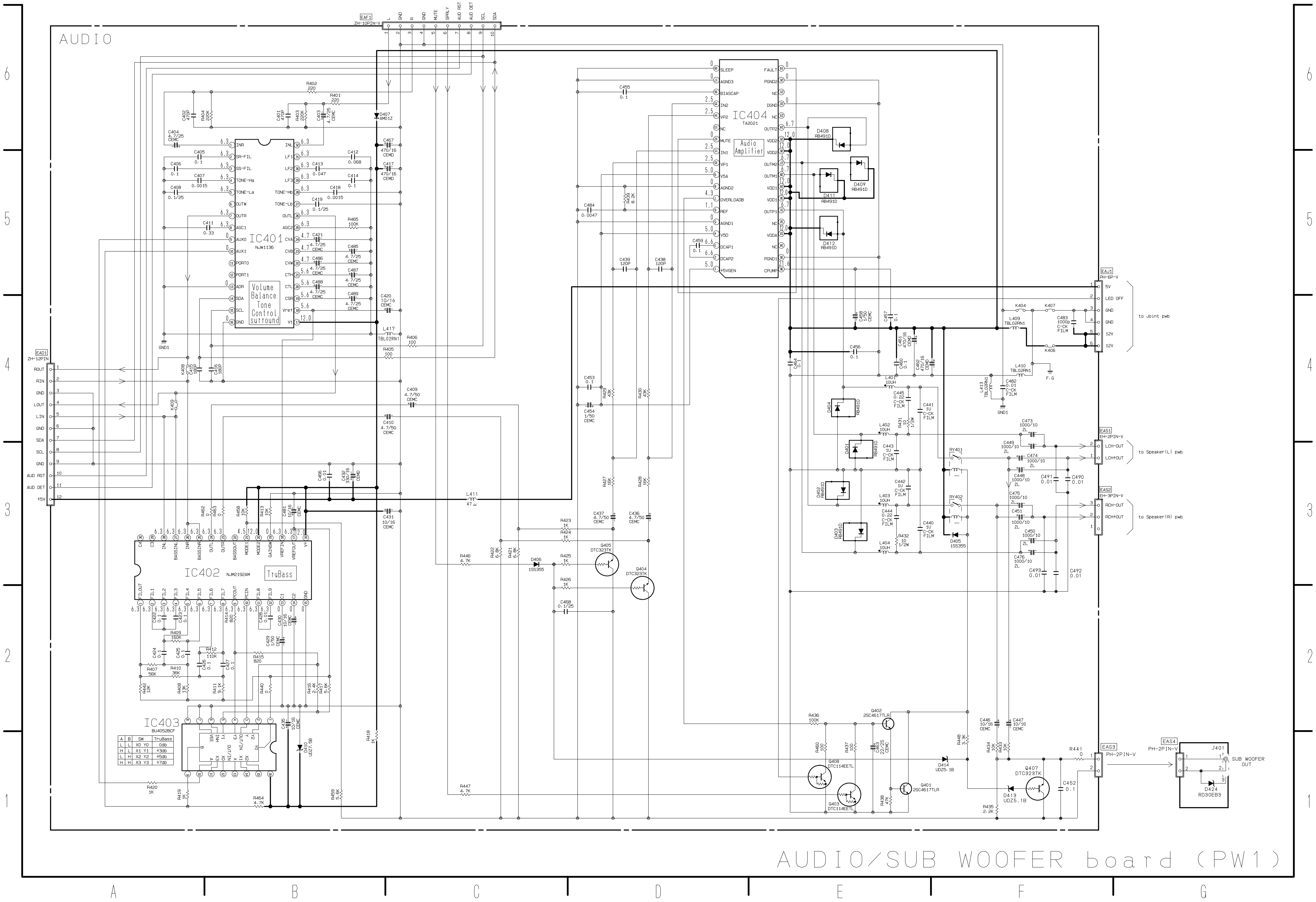

GL-2100M
Cx1: 0.47
Cx2: 0.47
Cy :2200P
L :1mH
R :470K
E901
AC INLET with noise filter
AC IN
CX1
R
L
CX2
CY
N
GL-2100M
EP00261
E902
E903
to chassis GND
PPU25
VT-2P(H)
N
L
R952 470K 1/2W
F952
T10A 250V
C952
0.47/250V
FILTER
(HOT)
(COLD)
PSW5
VH-8P(V)
#2.3.5.7 NC
ESW
PPU15
VH-6P(V)
#2.4.5 NC
to
POWER SUPPLY UNIT
K963
EGND5
SW
S900 MAIN SW
PAS3
EH-2P
Lch(+)
Lch(-)
E491
Frame GND
D491
RD30EB3
L481
D492
RD30EB3
SP.TERMINAL L
JA402
RED
BLACK
PAS4
EH-3P
Rch(+)
Rch(-)
E492
Frame GND
D493
RD30EB3
L482
D494
RD30EB3
SP.TERMINAL R
JA403
RED
BLACK
LED/RECEIVER
INDICATING LAMP
STANDBY/POWER-ON
D002
SPR-54MVW
R
G
IR RECEIVER
I001
GP1UM281RK
Vout
Vcc
GND
R012
4.7K
Q010
2SC1740S
C002
1000P
CK
C001
100/6.3
CEMD
R011
680
R010
270
R013
5.6K
R009
100
L001
100
PSC2
PH-6P-H
LEDOFF
LED2
LED1
GND
REM
STB5V
SUB-POWER
VOL-DOWN
VOL-UP
CH-DOWN
CH-UP
INPUT-SEL
MENU
SM01
SM02
SM03
SM04
SM05
SM06
SM07
GND1
RM06
820
RM07
1K
RM08
1.8K
RM09
2.7K
RM10
6.8K
RM05
220
KM04
TACT SW
ECONT
PH-4P
GND
ADKEY3
ADKEY2
ADKEY1
A
B
C
D
E
F
G
1
2
3
4
5
6

FILTER/SW/SP.TERMINAL L/SP.TERMINAL R/
LED RECEIVER/TACT SW board (PW1)

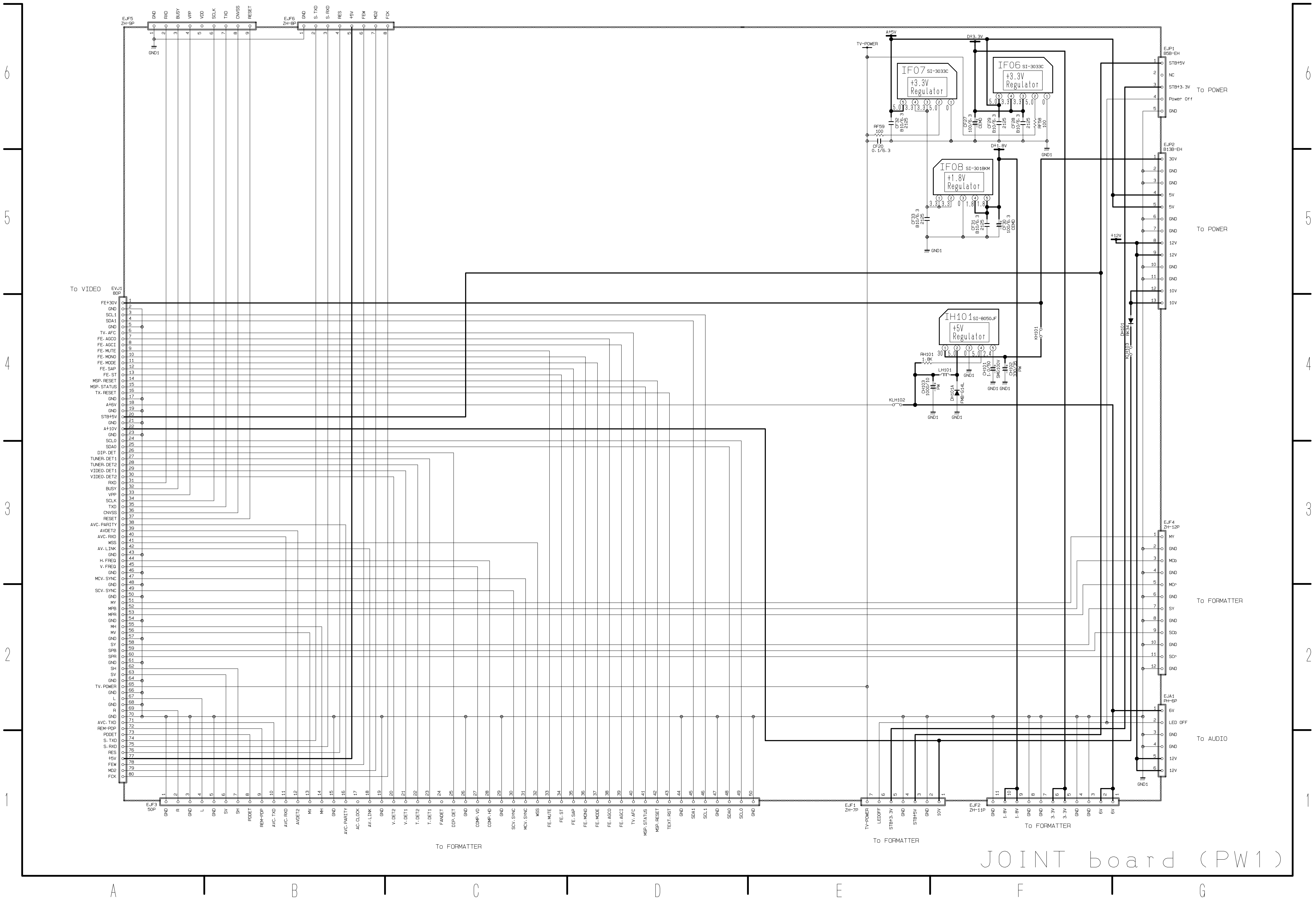

EAF1
ZH-10PIN-V
L
GND
R
GND
MUTE
SPRLY
AUD RST
AUD DET
SCL
SDA
IC401
NJW1136
Volume
Balance
Tone
Control
surround
IC402
NJM2192AM
TruBass
IC403
BU4052BCF
IC404
TA2021
Audio
Amplifier
EAD1
ZH-12PIN
ROUT
RIN
GND
LOUT
LIN
GND
SDA
SCL
GND
AUD RST
AUD DET
+5V
EAJ1
PH-6P-V
5V
LED OFF
GND
GND
12V
12V
to Joint pwb
EAS1
EH-2PIN-V
LCH-OUT
LCH+OUT
to Speaker(L) pwb
EAS2
EH-3PIN-V
RCH-OUT
RCH+OUT
to Speaker(R) pwb
Q401 2SC4617TLR
Q402 2SC4617TLR
Q403 DTC114EETL
Q404 DTC323TK
Q405 DTC323TK
Q408 DTC114EETL
D405 1SS355
D406 1SS355
D407 AM01Z
D410 UDZ7.5B
D414 UDZ5.1B
D408 RB491D
D409 RB491D
D411 RB491D
D412 RB491D
RY401
RY402
GND1
F.G
A
B
C
D
E
F
G
1
2
3
4
5
6

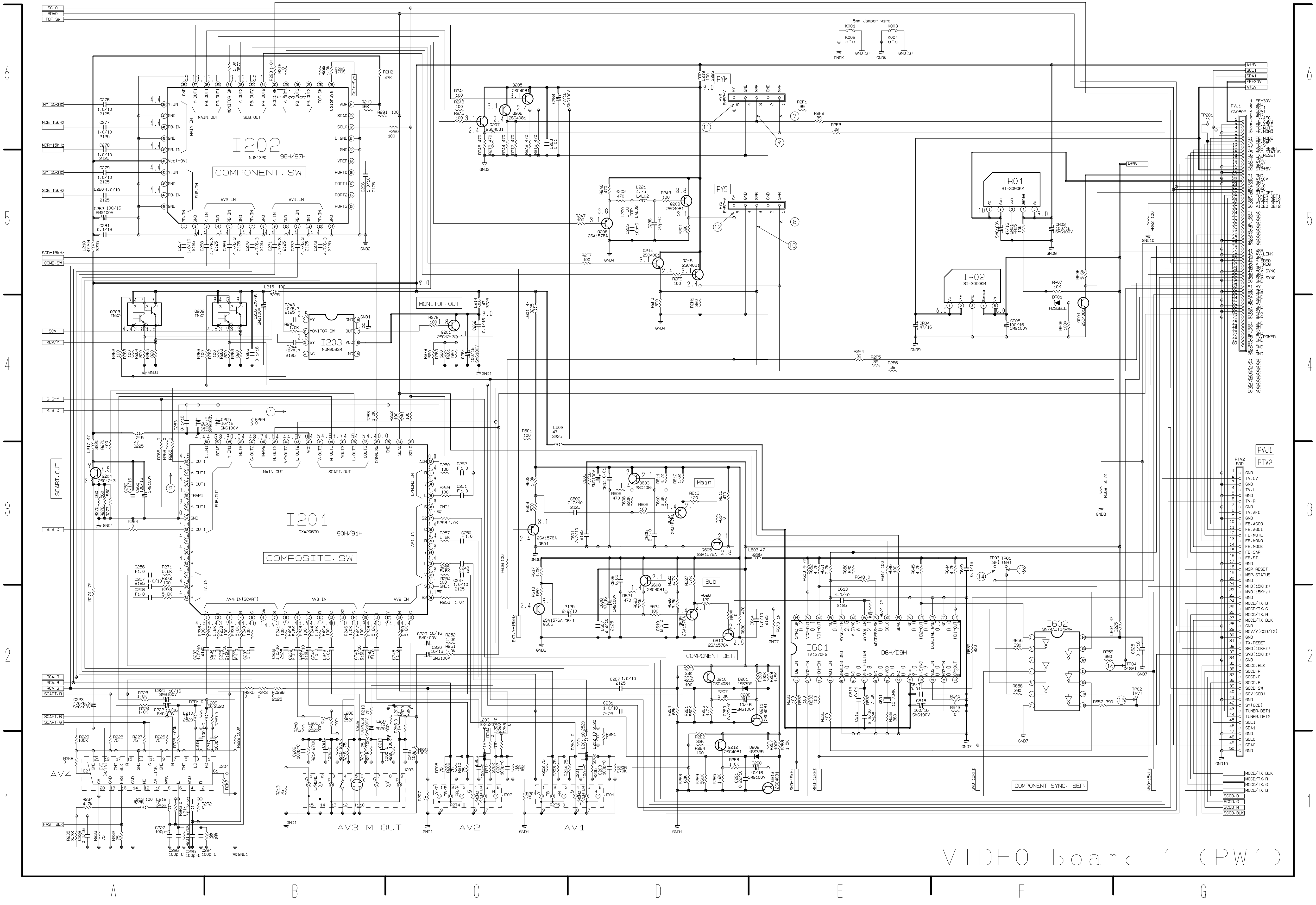
A	B	SW	TruBass
L	L	X0 Y0	0db
H	L	X1 Y1	+3db
L	H	X2 Y2	+5db
H	H	X3 Y3	+7db

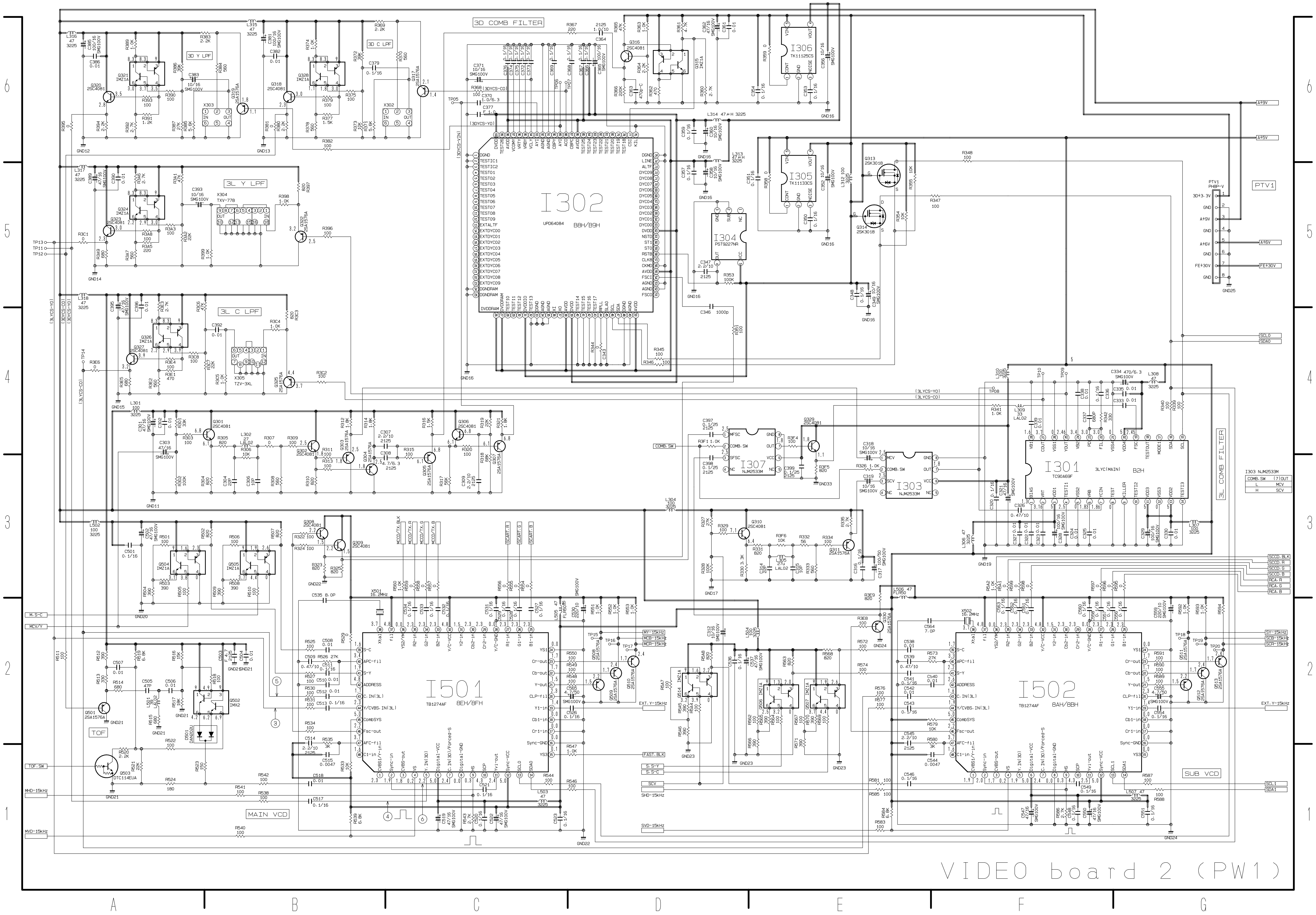
AUDIO board (PW1)

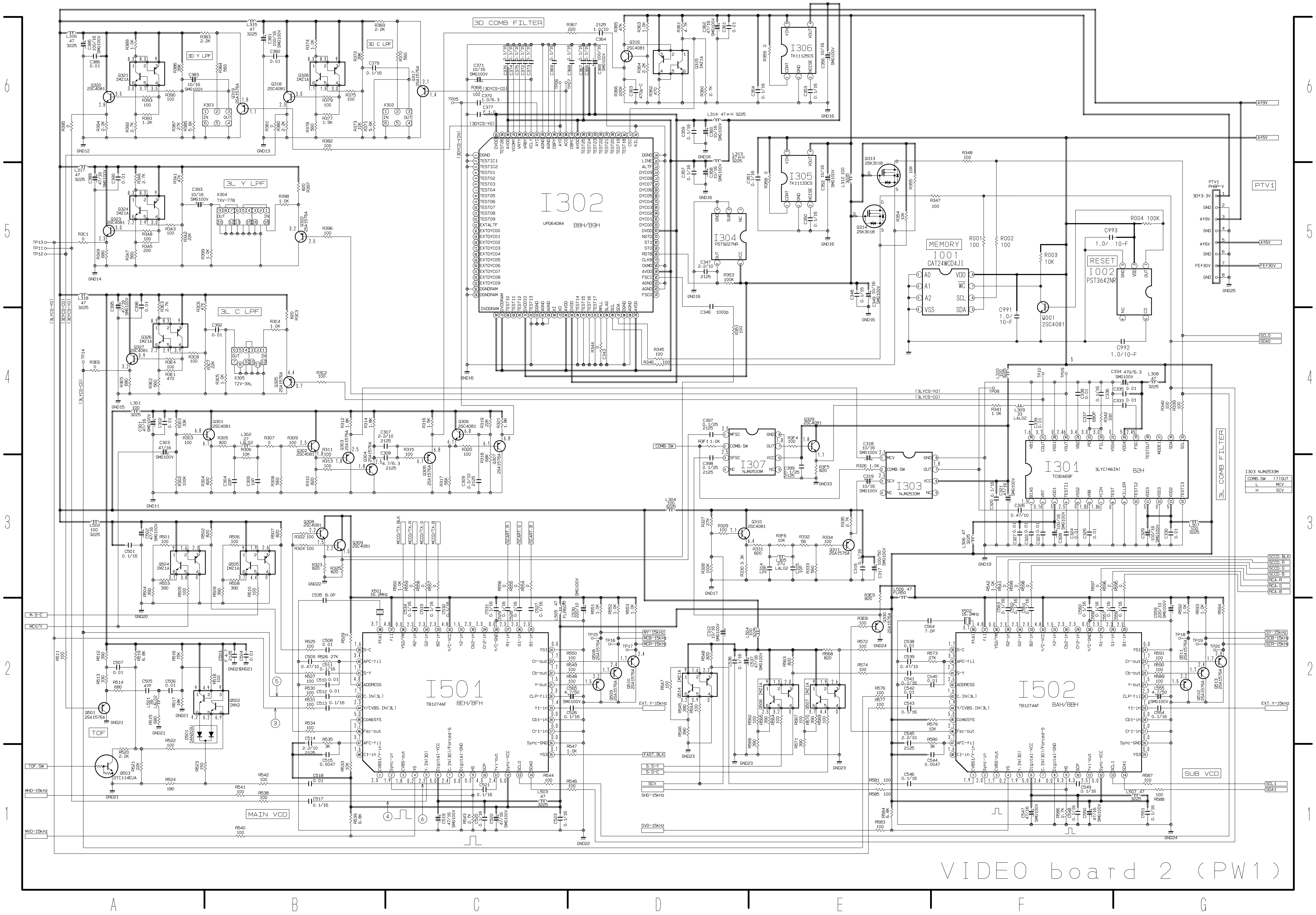

AUDIO
EAF1
ZH-10PIN-V
L
GND
R
GND
MUTE
SPRLY
AUD RST
AUD DET
SCL
SDA
IC401
NJW1136
Volume
Balance
Tone
Control
surround
IC402
NJM2192AM
TruBass
IC403
BU4052BCF
A B SW TruBass
L L X0 Y0 0db
H L X1 Y1 +3db
L H X2 Y2 +5db
H H X3 Y3 +7db
IC404
TA2021
Audio
Amplifier
EAD1
ZH-12PIN
ROUT
RIN
GND
LOUT
LIN
GND
SDA
SCL
GND
AUD RST
AUD DET
+5V
EAJ1
PH-6P-V
5V
LED OFF
GND
GND
12V
12V
to Joint pwb
EAS1
EH-2PIN-V
LCH-OUT
LCH+OUT
to Speaker(L) pwb
EAS2
EH-3PIN-V
RCH-OUT
RCH+OUT
to Speaker(R) pwb
EAS3
PH-2PIN-V
EAS4
PH-2PIN-V
J401
SUB WOOFER
OUT
D424
RD30EB3
Q402
2SC4617TLR
Q401
2SC4617TLR
Q403
DTC114EETL
Q408
DTC114EETL
Q407
DTC323TK
Q405
DTC323TK
Q404
DTC323TK
D413
UDZ5.1B
D414
UDZ5.1B
D405
1SS355
D406
1SS355
D407
AM01Z
D410
UDZ7.5B
RY401
RY402
L411
47μ
L417
TBL02RN1
L409
TBL02RN1
L410
TBL02RN1
L413
TBL02RN1
A
B
C
D
E
F
G
1
2
3
4
5
6

AUDIO/SUB WOOFER board (PW1)

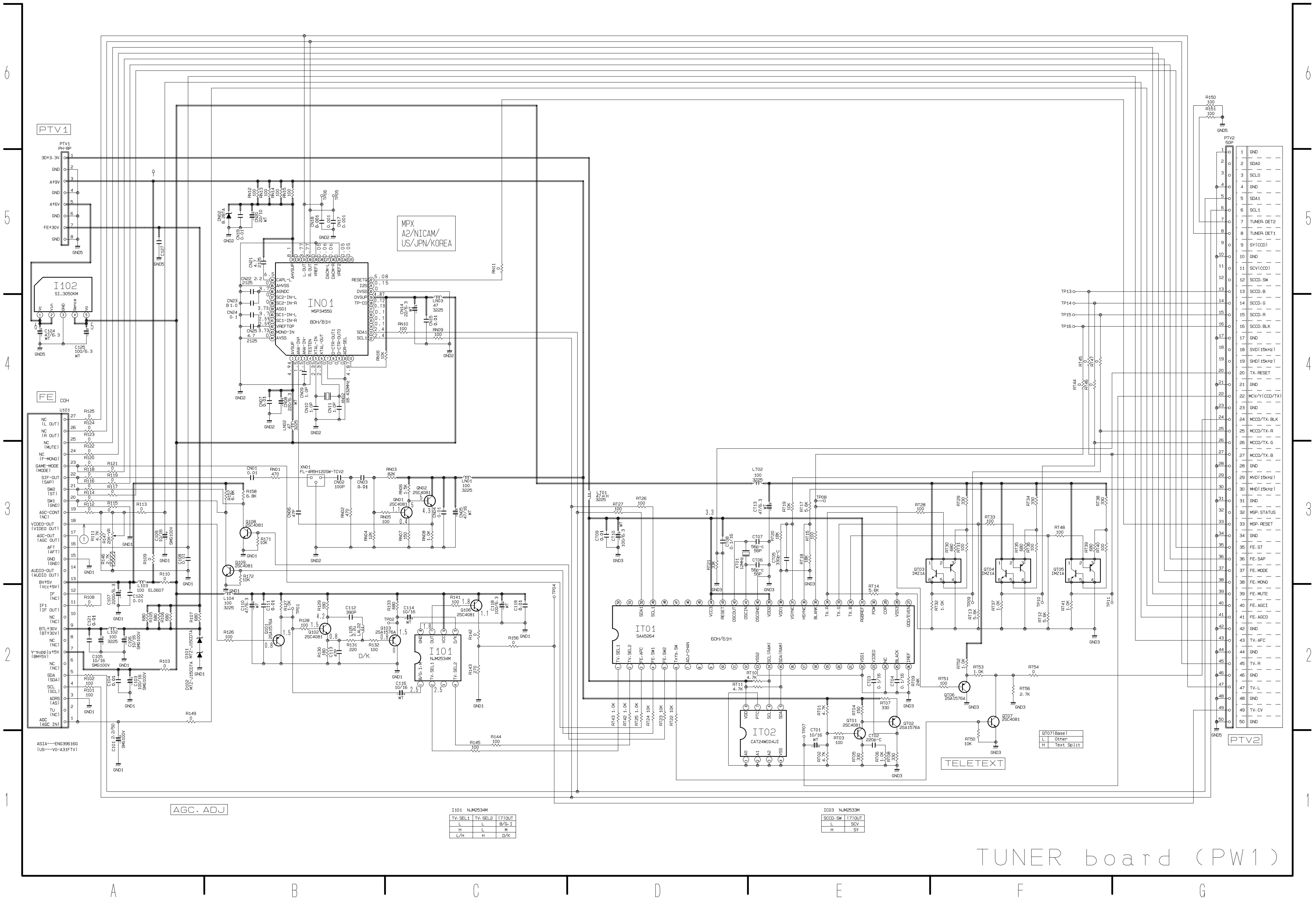

JOINT board (PW1)
To VIDEO
EVJ1 80P
FE+30V
GND
SCL1
SDA1
TV-AFC
FE-AGCO
FE-AGCI
FE-MUTE
FE-MONO
FE-MODE
FE-SAP
FE-ST
MSP-RESET
MSP-STATUS
TX-RESET
A+6V
STB+5V
A+10V
SCL0
SDA0
DIP-DET
TUNER-DET1
TUNER-DET2
VIDEO-DET1
VIDEO-DET2
RXD
BUSY
VPP
SCLK
TXD
CNVSS
RESET
AVC-PARITY
AVDET2
AVC-RXD
WSS
AV-LINK
H-FREQ
V-FREQ
MCV-SYNC
SCV-SYNC
MY
MPB
MPR
MH
MV
SY
SPB
SPR
SH
SV
TV-POWER
L
R
AVC-TXD
REM-PDP
PDDET
S-TXD
S-RXD
RES
+5V
FEW
MD2
FCK
EJF5 ZH-9P
GND
RXD
BUSY
VPP
VDD
SCLK
TXD
CNVSS
RESET
GND1
EJF6 ZH-8P
GND
S-TXD
S-RXD
RES
+5V
FEW
MD2
FCK
TV-POWER
A+5V
D+3.3V
IF07 SI-3033C
+3.3V Regulator
IF06 SI-3033C
+3.3V Regulator
CF32 B10/6.3 2125
CF27 100/6.3 CEMD
CF28 B10/6.3 2125
CF29 B10/6.3 2125
RF58 100
RF59 100
CF20 0.1/6.3
GND1
D+1.8V
IF08 SI-3018KM
+1.8V Regulator
CF33 B10/6.3 2125
CF31 B10/6.3 2125
CF30 100/6.3 CEMD
IH101 SI-8050JF
+5V Regulator
RH101 1.8K
LH101
CH101 1/50
CH102 330/25 PW
CH103 1000/10 PW
DH101A FMB-G14L
SMD10V
KLH102
KH101
DH101 RK34
KLH103
+12V
EJP1 B5B-EH
STB+5V
NC
STB+3.3V
Power Off
GND
To POWER
EJP2 B13B-EH
30V
GND
5V
12V
10V
To POWER
EJF4 ZH-12P
MY
GND
MCb
MCr
SY
SCb
SCr
To FORMATTER
EJA1 PH-6P
6V
LED OFF
GND
12V
To AUDIO
EJF3 50P
GND
R
L
SV
SH
PDDET
REM-PDP
AVC-TXD
AVC-RXD
AVDET2
MV
MH
AVC-PARITY
AC.CLOCK
AV-LINK
V.DET2
V.DET1
T.DET2
T.DET1
FANDET
DIP-DET
COMP.VD
COMP.HD
SCV-SYNC
MCV-SYNC
WSS
FE-MUTE
FE-ST
FE-SAP
FE-MONO
FE-MODE
FE-AGCO
FE-AGCI
TV.AFC
MSP-STATUS
MSP-RESET
TEXT-RST
SDA1
SCL1
SDA0
SCL0
To FORMATTER
EJF1 ZH-7P
TV-POWER
LEDOFF
STB+3.3V
GND
STB+5V
10V
To FORMATTER
EJF2 ZH-11P
GND
1.8V
3.3V
6V
To FORMATTER
A
B
C
D
E
F
G
1
2
3
4
5
6


VIDEO board 1 (PW1)
I202
NJM1320
96H/97H
COMPONENT. SW
I201
CXA2069Q
90H/91H
COMPOSITE. SW
I203
NJM2533M
MONITOR. SW
MONITOR. OUT
IR01
SI-3090KM
IR02
SI-3050KM
I601
TA1370FG
D8H/D9H
I602
SN74ACT14PWR
PYM
PYS
PVJ1
PTV2
50P
Main
Sub
COMPONENT DET.
COMPONENT SYNC. SEP.
SCART. OUT
5mm Jamper wire
AV4
AV3 M-OUT
AV2
AV1
SCL0
SDA0
TOF. SW
MY-15kHz
MCB-15kHz
MCR-15kHz
SY-15kHz
SCB-15kHz
SCR-15kHz
COMB. SW
SCV
MCV/Y
S. S-Y
M. S-C
S. S-C
RCA. R
RCA. B
RCA. G
SCART. R
SCART. B
SCART. G
FAST. BLK
A+9V
SCL1
SDA1
FE+30V
A+5V
MCCD/TX. BLK
MCCD/TX. R
MCCD/TX. G
MCCD/TX. B
SCCD. B
SCCD. G
SCCD. R
SCCD. BLK
1
2
3
4
5
6
A
B
C
D
E
F
G


VIDEO board 2 (PW1)
3D COMB FILTER
3D Y LPF
3D C LPF
3L Y LPF
3L C LPF
3L COMB FILTER
MAIN VCD
SUB VCD
TOF
PTV1
I302
UPD64084
B8H/B9H
I301
TC90A69F
3LYC(MAIN)
B2H
I303
NJM2533M
I304
PST9227NR
I305
TK11133CS
I306
TK11125CS
I307
NJM2533M
I501
TB1274AF
8EH/BFH
I502
TB1274AF
8AH/8BH
I303 NJM2533M
COMB.SW
L
H
MCV
SCV
A+9V
A+5V
A+6V
FE+30V
SCL0
SDA0
SCL1
SDA1
M.S-C
MCV/Y
TOF.SW
MHD-15kHz
MVD-15kHz
COMB.SW
EXT.Y-15kHz
FAST.BLK
S.S-Y
S.S-C
SCV
SHD-15kHz
SVD-15kHz
SCCD.BLK
SCCD.R
SCCD.G
SCCD.B
RCA.R
RCA.G
RCA.B
SY-15kHz
SCB-15kHz
SCR-15kHz
MY-15kHz
MCB-15kHz
MCR-15kHz
TP13
TP11
TP12
TP14
1
2
3
4
5
6
A
B
C
D
E
F
G


3D COMB FILTER
3D Y LPF
3D C LPF
3L Y LPF
3L C LPF
I302
UPD64084
B8H/B9H
I306
TK11125CS
I305
TK11133CS
I304
PST9227NR
MEMORY
I001
CAT24WC04JI
RESET
I002
PST3642NR
PTV1
PH8P-V
3D+3.3V
GND
A+9V
A+6V
FE+30V
A+9V
A+5V
A+6V
FE+30V
SCL0
SDA0
I301
TC90A69F
3LYC(MAIN)
B2H
3L COMB FILTER
I307
NJM2533M
I303
NJM2533M
I303 NJM2533M
COMB.SW
L
H
MCV
SCV
COMB.SW
I501
TB1274AF
8EH/8FH
I502
TB1274AF
8AH/8BH
MAIN VCD
SUB VCD
TOF
TOF.SW
M.S-C
MCV/Y
MHD-15kHz
MVD-15kHz
EXT.Y-15kHz
FAST.BLK
S.S-Y
S.S-C
SCV
SHD-15kHz
SVD-15kHz
SCCD.BLK
SCCD.R
SCCD.G
SCCD.B
RCA.R
RCA.G
RCA.B
SY-15kHz
SCB-15kHz
SCR-15kHz
SCL1
SDA1
MY-15kHz
MCB-15kHz
MCR-15kHz
6
5
4
3
2
1
A
B
C
D
E
F
G

VIDEO board 2 (PW1)


PTV1
PTV1 PH-8P
3D+3.3V
GND
A+9V
GND
A+6V
GND
FE+30V
GND
GND5
I102
SI-3050KM
C124 47/6.3 WT
C125 100/6.3 WT
FE
U101
NC (L OUT)
NC (R OUT)
NC (MUTE)
NC (F-MONO)
GAME-MODE (MODE)
SIF-OUT (SAP)
SW2 (ST)
SW1 (GND)
AGC-CONT (NC)
VIDEO-OUT (VIDEO OUT)
AGC-OUT (AGC OUT)
AFT (AFT)
GND (GND)
AUDIO-OUT (AUDIO OUT)
BV+5V (Vcc+9V)
IF (NC)
IF1 (IF OUT)
BTL+30V (BT+30V)
NC (NC)
V-supply+5V (BM+5V)
NC (NC)
SDA (SDA)
SCL (SCL)
ADRS (AS)
TU (NC)
AGC (AGC IN)
ASIA---ENG39616G
(US---VO-A31FTV)
AGC. ADJ
MPX
A2/NICAM/
US/JPN/KOREA
IN01
MSP3455G
80H/81H
XN01 FL-4R5H120S-TCV2
I101
NJM2534M
D/K
IT01
SAA5264
60H/61H
IT02
CAT24WC04JI
TELETEXT
QT03 IMZ1A
QT04 IMZ1A
QT05 IMZ1A
TP13
TP14
TP15
TP16
PTV2
PTV2 50P
GND
SDA0
SCL0
GND
SDA1
SCL1
TUNER.DET2
TUNER.DET1
SY(CCD)
GND
SCV(CCD)
SCCD.SW
SCCD.B
SCCD.G
SCCD.R
SCCD.BLK
GND
SVD(15kHz)
SHD(15kHz)
TX.RESET
GND
MCV/Y(CCD/TX)
GND
MCCD/TX.BLK
MCCD/TX.R
MCCD/TX.G
MCCD/TX.B
GND
MVD(15kHz)
MHD(15kHz)
GND
MSP.STATUS
MSP.RESET
GND
FE.ST
FE.SAP
FE.MODE
FE.MONO
FE.MUTE
FE.AGCI
FE.AGCO
GND
TV.AFC
GND
TV.R
GND
TV.L
GND
TV.CV
GND
A
B
C
D
E
F
G
1
2
3
4
5
6

I101 NJM2534M

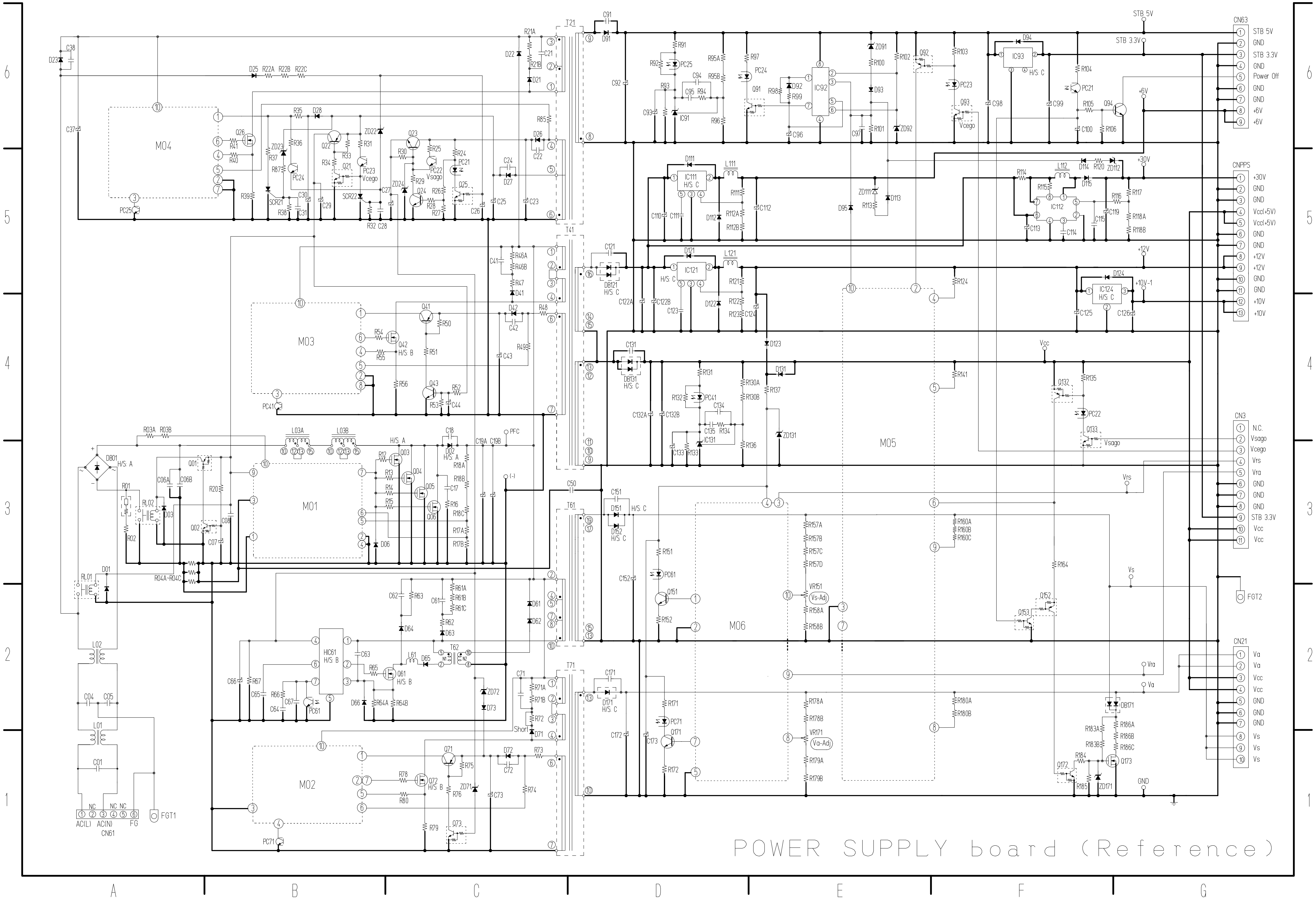
TV.SEL1	TV.SEL2	(7)OUT
L	L	B/G.I
H	L	M
L/H	H	D/K

IC03 NJM2533M

SCCD.SW	(7)OUT
L	SCV
H	SY

QT07(Base)	
L	Other
H	Text Split

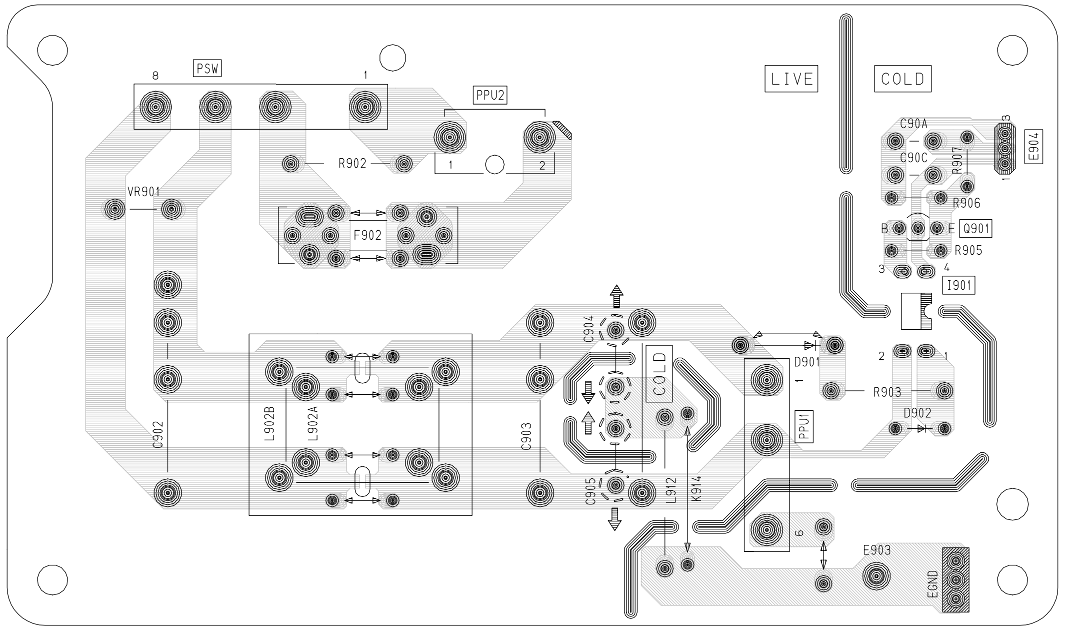
TUNER board (PW1)


M01
M02
M03
M04
M05
M06
T21
T41
T61
T71
T62
CN63
STB 5V
GND
STB 3.3V
GND
Power Off
GND
GND
+6V
+6V
CNPPS
+30V
GND
GND
Vcc(+5V)
Vcc(+5V)
GND
GND
+12V
+12V
GND
GND
+10V
+10V
CN3
N.C.
Vsago
Vcego
Vrs
Vra
GND
GND
GND
STB 3.3V
Vcc
Vcc
CN21
Va
Va
Vcc
Vcc
GND
GND
GND
Vs
Vs
Vs
CN61
AC(L)
AC(N)
NC
NC NC
FG
FGT1
FGT2
STB 5V
STB 3.3V
+6V
+30V
+12V
+10V-1
Vcc
Vrs
Vs
Vra
Va
GND
PFC
(-)
DB01
H/S A
RL01
RL02
L01
L02
L03A
L03B
HIC61
H/S B
IC91
IC92
IC93
IC111
IC112
IC121
IC124
IC131
H/S C
VR151
Vs-Adj
VR171
Va-Adj
Vsago
Vcego
Short
A
B
C
D
E
F
G
1
2
3
4
5
6

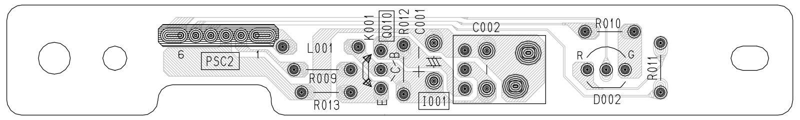
POWER SUPPLY board (Reference)

9.Printed wiring board diagram

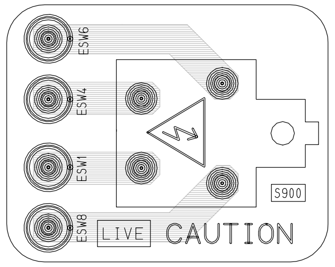
FILTER board


PSW
8
1
PPU2
1
2
R902
VR901
F902
C902
L902B
L902A
C903
C904
COLD
C905
L912
K914
D901
PPU1
R903
D902
E903
EGND
LIVE
COLD
C90A
C90C
R907
E904
R906
Q901
B
E
R905
3
4
I901
2
1
6

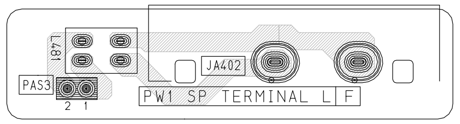
LED/RECEIVER board


6
PSC2
1
L001
R009
R013
D001
Q010
R012
C001
C002
I001
R010
R
G
R011
D002

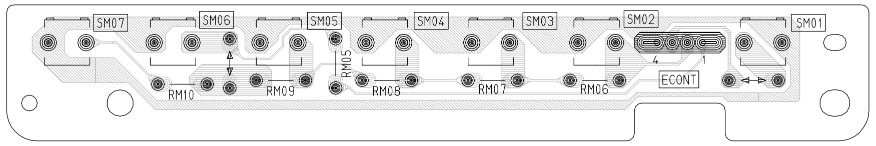
SW board


ESW6
ESW4
ESW1
ESW8
S900
LIVE
CAUTION

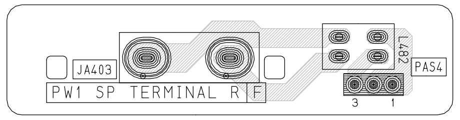
SP TERMINAL L board


L481
PAS3
2 1
JA402
PW1 SP TERMINAL L F

TACT SW board

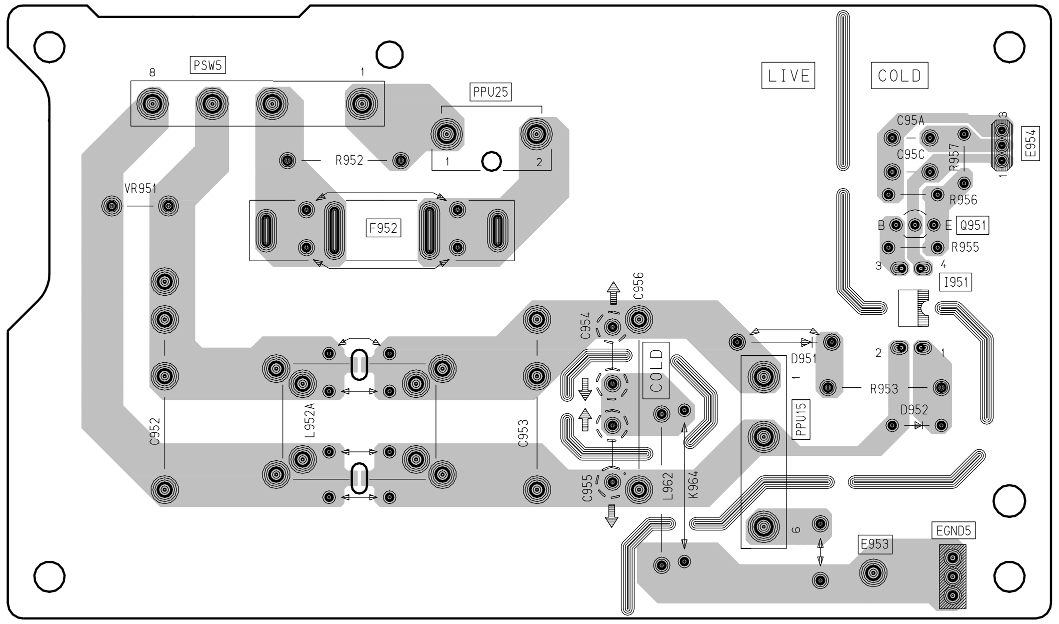

SM07
SM06
SM05
SM04
SM03
SM02
SM01
RM10
RM09
RM05
RM08
RM07
RM06
ECONT
4
1

SP TERMINAL R board

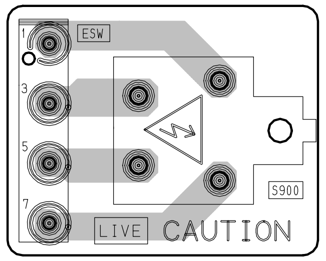

JA403
PW1 SP TERMINAL R F
L482
PAS4
3 1

Printed wiring board diagram

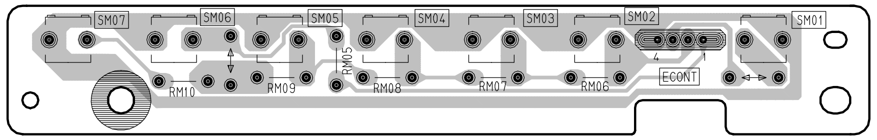
FILTER board


PSW5
8
1
PPU25
1
2
R952
VR951
F952
LIVE
COLD
C95A
C95C
R957
E954
3
1
R956
B
E
Q951
R955
3
4
I951
C956
C954
COLD
C952
L952A
C953
C955
L962
K964
D951
1
PPU15
2
1
R953
D952
6
E953
EGND5

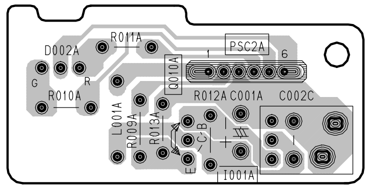
SW board


1
3
5
7
ESW
S900
LIVE
CAUTION

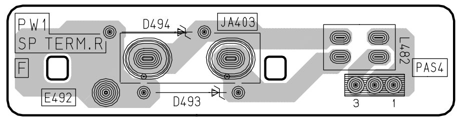
TACT SW board


SM07
SM06
SM05
SM04
SM03
SM02
SM01
RM05
4
1
RM10
RM09
RM08
RM07
RM06
ECONT

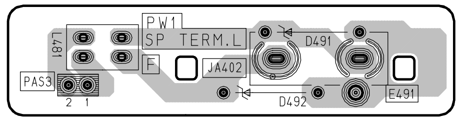
LED/RECEIVER board


R011A
D002A
PSC2A
1
6
Q010A
G
R
R010A
R012A
C001A
C002C
L001A
R009A
R013A
C
B
E
I001A

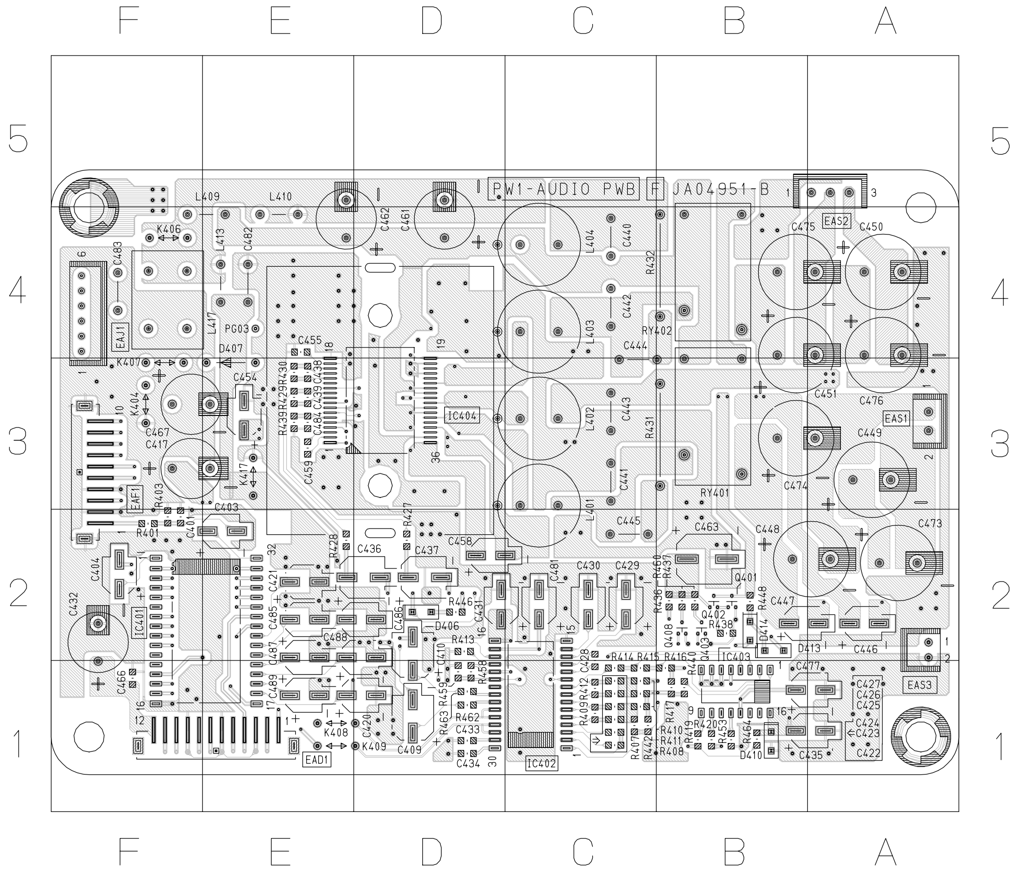
SPEAKER TERMINAL (R) board


PW1
SP TERM.R
F
D494
JA403
L482
PAS4
E492
D493
3
1

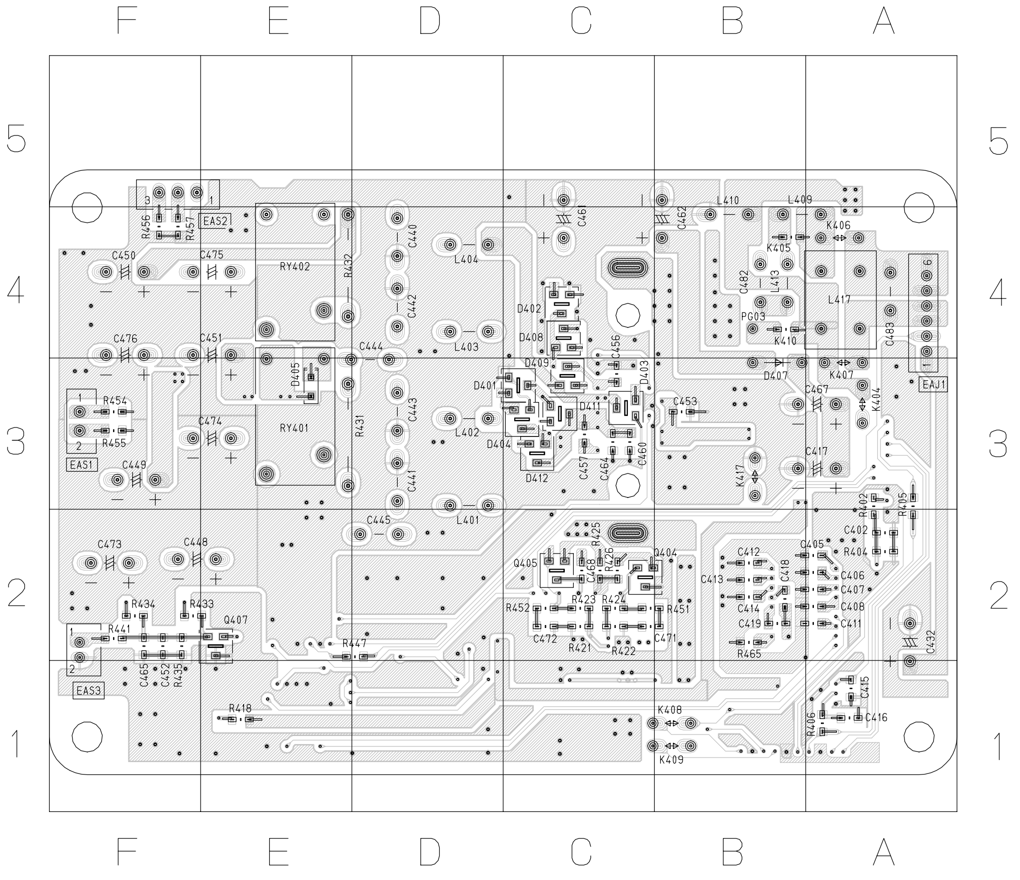
SPEAKER TERMINAL (L) board


L481
PW1
SP TERM.L
F
JA402
D491
PAS3
2
1
D492
E491

AUDIO board (side-A)


F
E
D
C
B
A
5
4
3
2
1
PW1-AUDIO PWB F JA04951-B
IC401
IC402
IC403
IC404
EAD1
EAF1
EAJ1
EAS1
EAS2
EAS3
RY401
RY402

AUDIO board (side-B)


F
E
D
C
B
A
5
4
3
2
1
EAS1
EAS2
EAS3
EAJ1
RY401
RY402

Mainly chip parts reference table

Cir.No.	Position
D406	D2
D410	B1
D413	B2
D414	B2
EAD1	E1
EAF1	F3
IC401	E2
IC402	C1

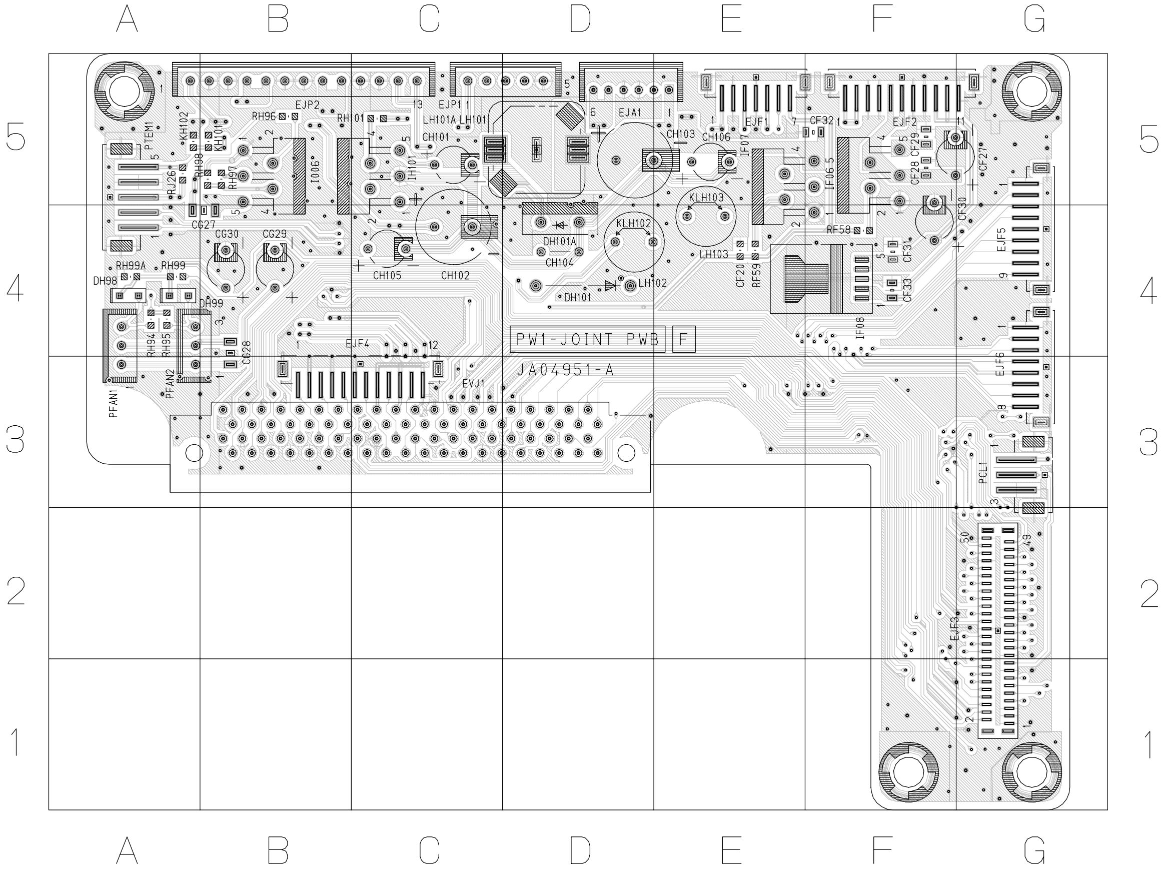
Cir.No.	Position
IC403	B1
IC404	D3
Q401	B2
Q402	B2
Q403	B2
Q408	B2

Mainly chip parts reference table

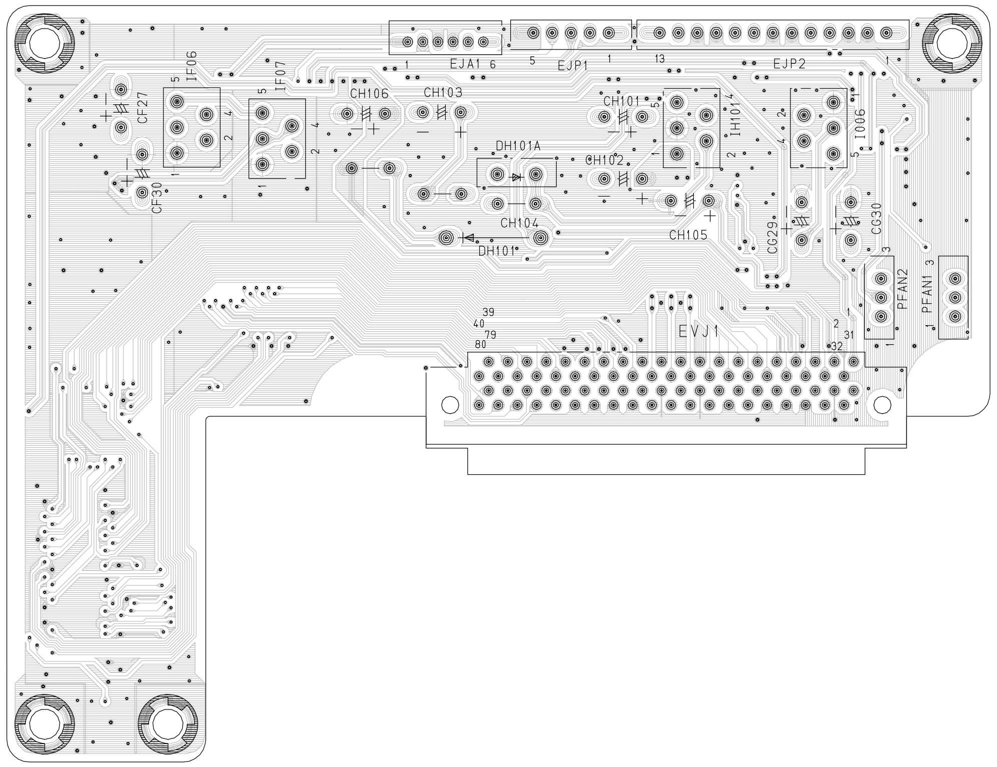
Cir.No.	Position
D401	D3
D402	D4
D403	D3
D404	D3
D405	B3
D408	D4
D409	D3
D411	D3

Cir.No.	Position
D412	D3
K405	E4
K410	E4
Q404	D2
Q405	D2
Q407	B2

JOINT board (side-A)


A
B
C
D
E
F
G
5
4
3
2
1
PW1-JOINT PWB
F
JA04951-A
EJP2
EJP1
EJA1
EJF1
EJF2
EJF3
EJF4
EJF5
EJF6
EVJ1
PCL1
PTEM1
PFAN1
PFAN2
IF08

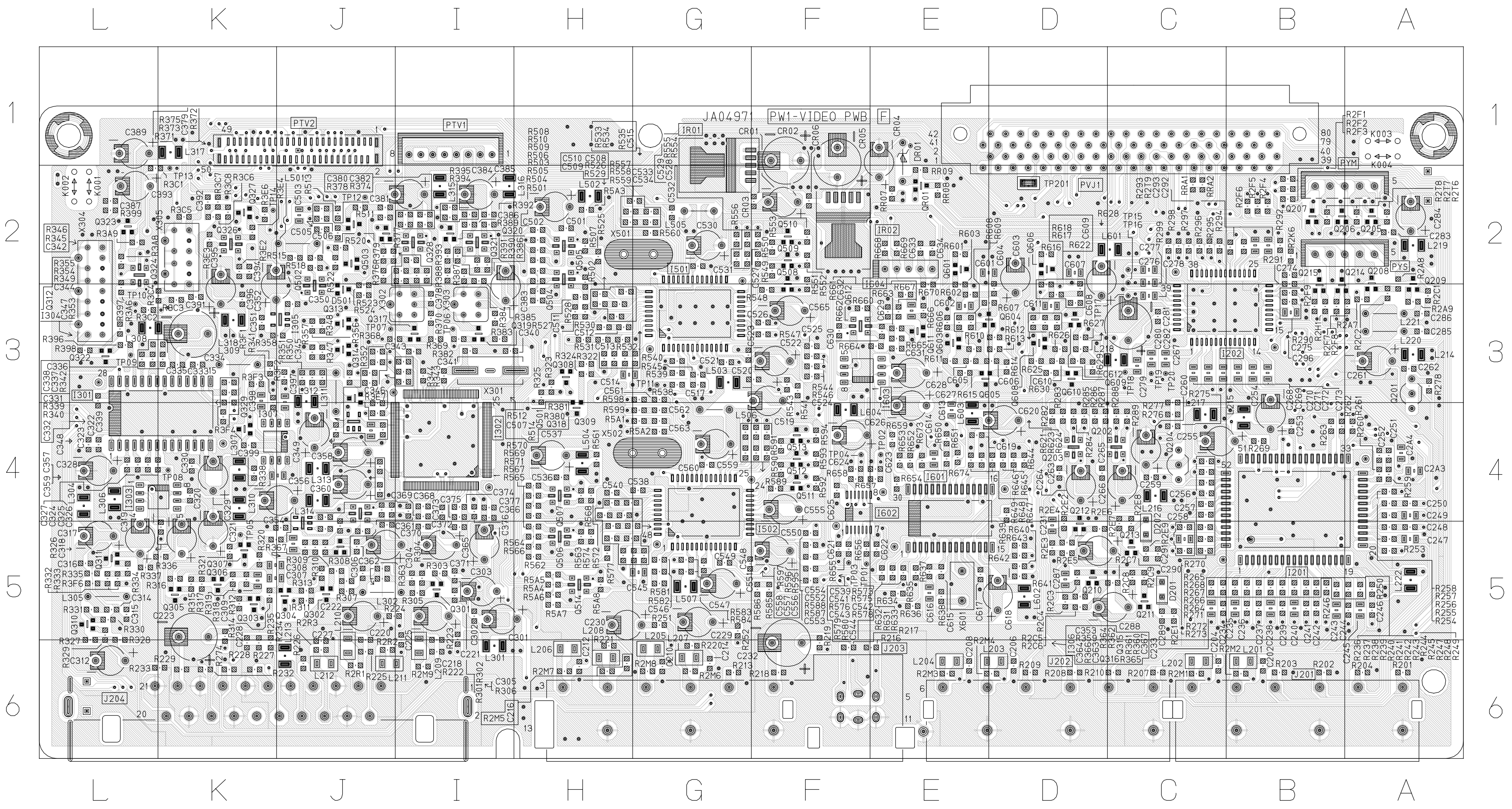
JOINT board (side-B)


EJA1
EJP1
EJP2
EVJ1
PFAN1
PFAN2
IF06
IF07
CF27
CF30
CH106
CH103
CH101
CH102
CH104
CH105
DH101A
DH101
IH101
I006
CG29
CG30

Mainly chip parts reference table

Cir.No.	Position
DH98	A4
DH99	A4
EJF1	E5
EJF2	F5
EJF3	G2
EJF4	C3
EJF5	G4
EJF6	G3
IF08	F4
KH101	B5
KH102	A5
LH101	D5
LH101A	D5
PCL1	G3
PTEM1	A5

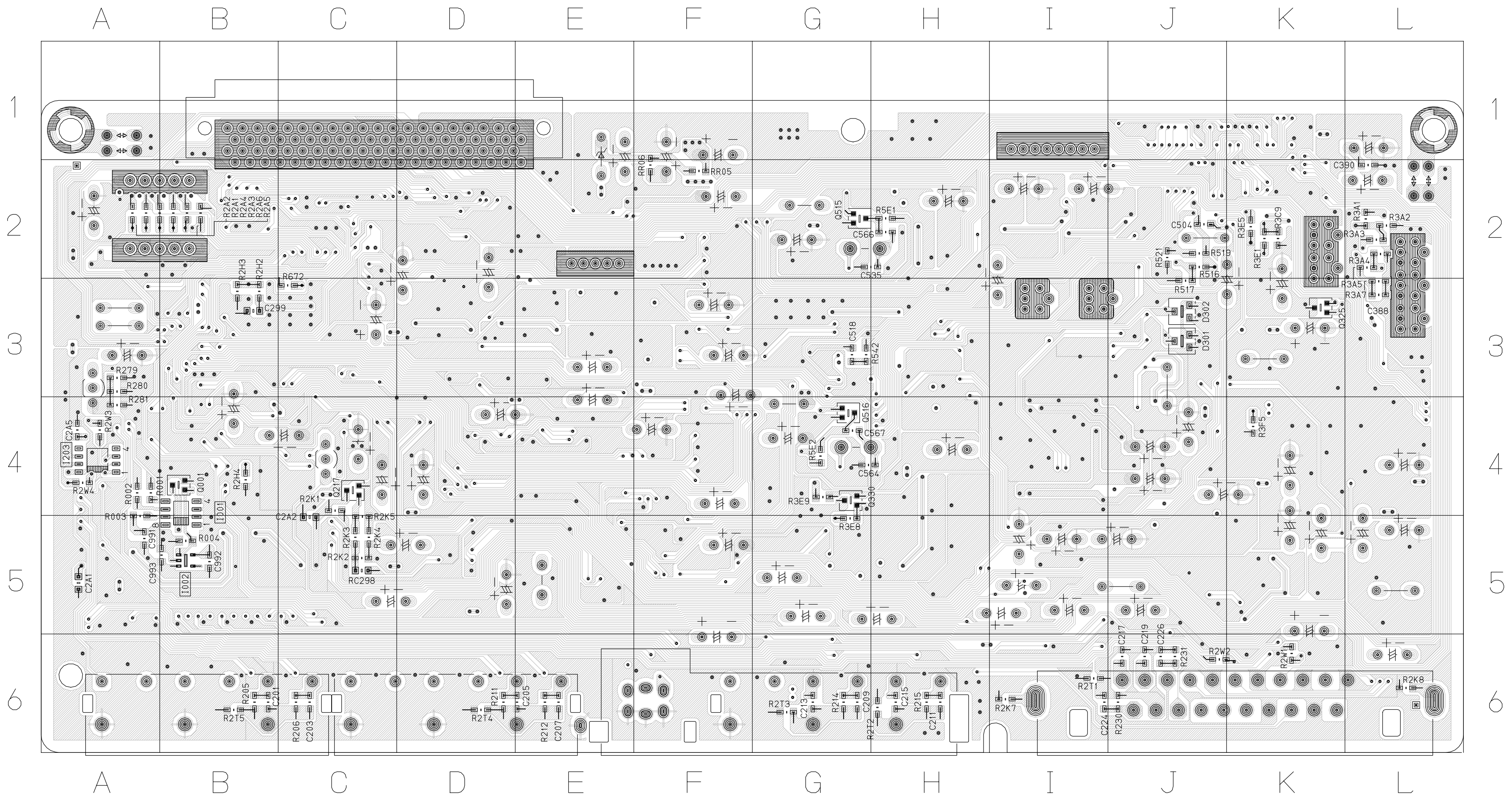
VIDEO board (side-A)



Mainly chip parts reference table

Cir.No.	Position
D201	C5
D202	C5
D501	J3
I201	B4
I202	C3
I301	K4
I302	I4
I303	K4
I304	J4
I305	J3
I306	J5
I307	K4
I501	G3
I502	G4
I601	E4
I602	F4
I603	F3
IR01	G2
IR02	F2
L201	B6
L202	C6
L203	D6
L204	E6
L205	G6
L206	H6
L207	G6
L208	H6
L209	I6
L210	J6
L211	J6
L212	J6
L213	J6
L214	A3
L215	B4
L216	C4
L217	C4
L218	C3
L219	A2
L222	A5
L301	I6
L304	L4
L306	L4
L307	K4
L308	L3
L310	K4
L312	J3
L313	J4
L314	J4
L315	I2
L316	I2
L317	K1
L318	K3
L502	H2
L503	G3
L504	H4
L507	G5
L601	C2
L602	D5
L603	E4
L604	F4
PTV2	J1
Q202	C4
Q203	D4
Q205	A2
Q206	B2
Q207	B2
Q208	A2
Q209	A3
Q210	D5
Q211	C5
Q212	D5
Q213	C5
Q214	B3
Q215	B3
Q301	I5
Q302	J5

VIDEO board (side-B)

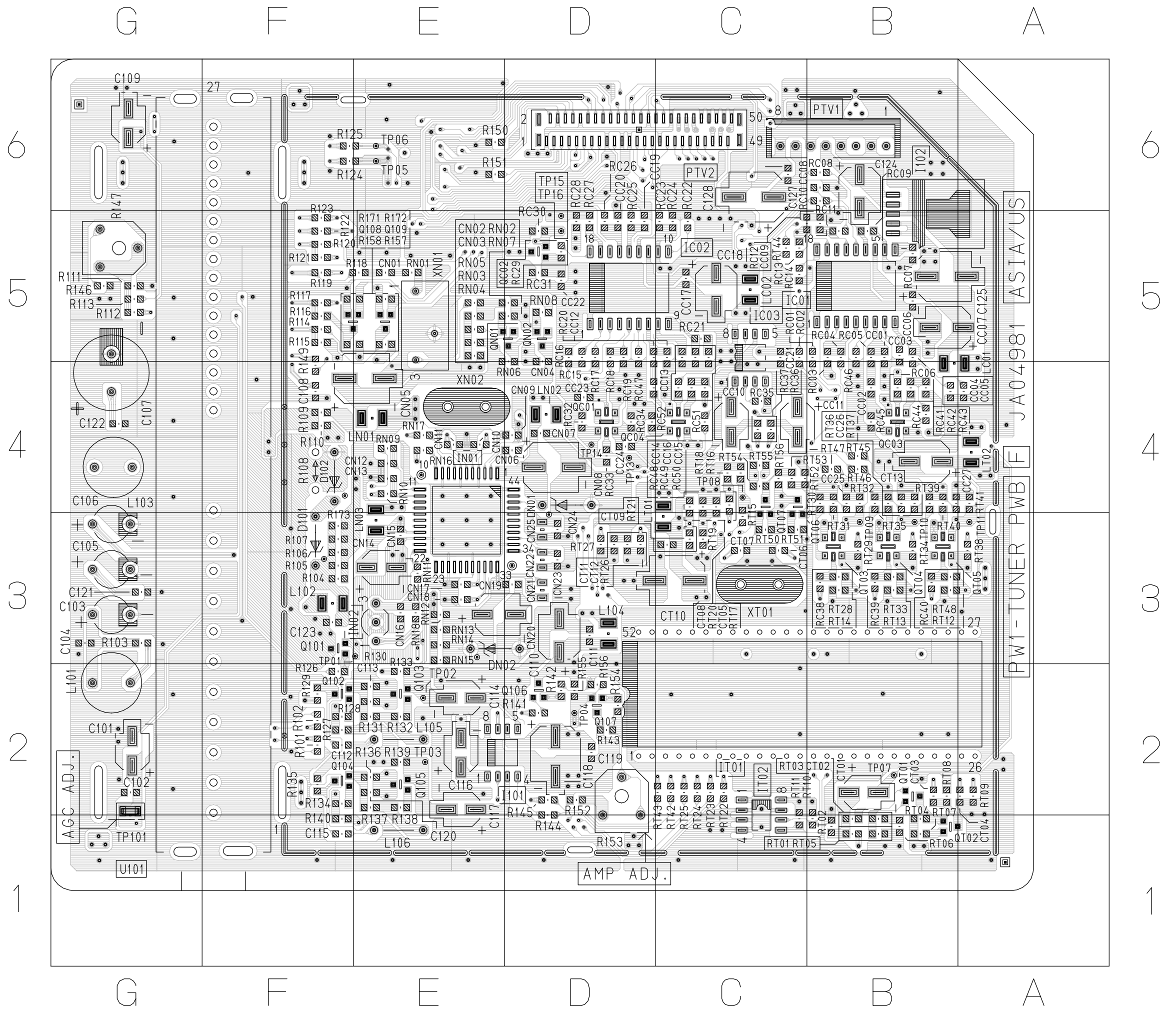

A
B
C
D
E
F
G
H
I
J
K
L
1
2
3
4
5
6
R279
R280
R281
R672
C299
RR05
RR06
Q515
R5E1
C566
C565
C518
R542
Q516
C567
C564
R3E9
Q330
R3E8
C504
R521
R517
D302
D301
C390
R3A2
R3A3
R3A4
R3A5
R3A7
C388
Q325
R3F5
R2K1
Q217
R2K5
R2K3
R2K4
R2K2
RC298
C2A2
I203
I001
Q001
I002
R003
R004
C991
C992
C993
C2A1
R205
R2T5
R206
C203
R211
R2T4
C205
R212
C207
R2T3
C213
R214
C209
R2T2
C215
C211
R2K7
R2T1
C224
R230
C217
C219
C226
R231
R2W2
R2K8

Mainly chip parts reference table

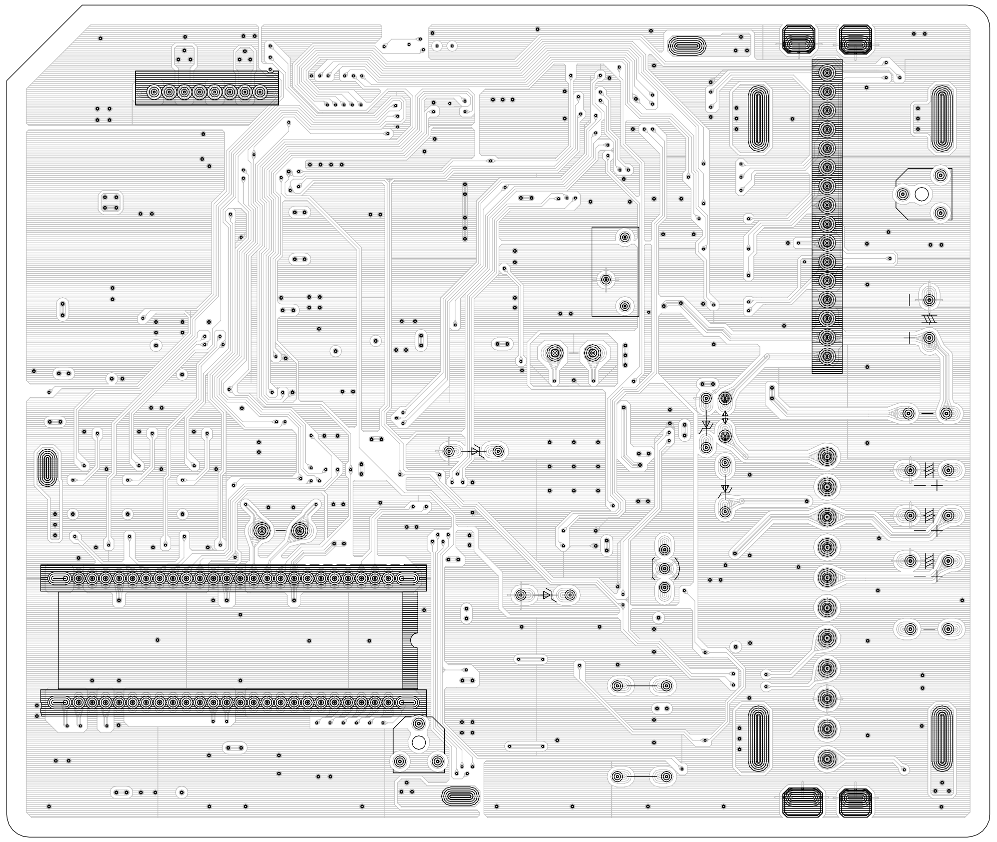
Cir.No.	Position
D301	J3
D302	J3
I001	B4
I002	B5
I203	A4
Q001	B4

Cir.No.	Position
Q217	C4
Q325	K3
Q330	G4
Q515	G2
Q516	G4

TUNER board (Side-A)


G
F
E
D
C
B
A
6
5
4
3
2
1
AGC ADJ.
AMP ADJ.
ASIA/US
JA04981
F
PWI-TUNER PWB

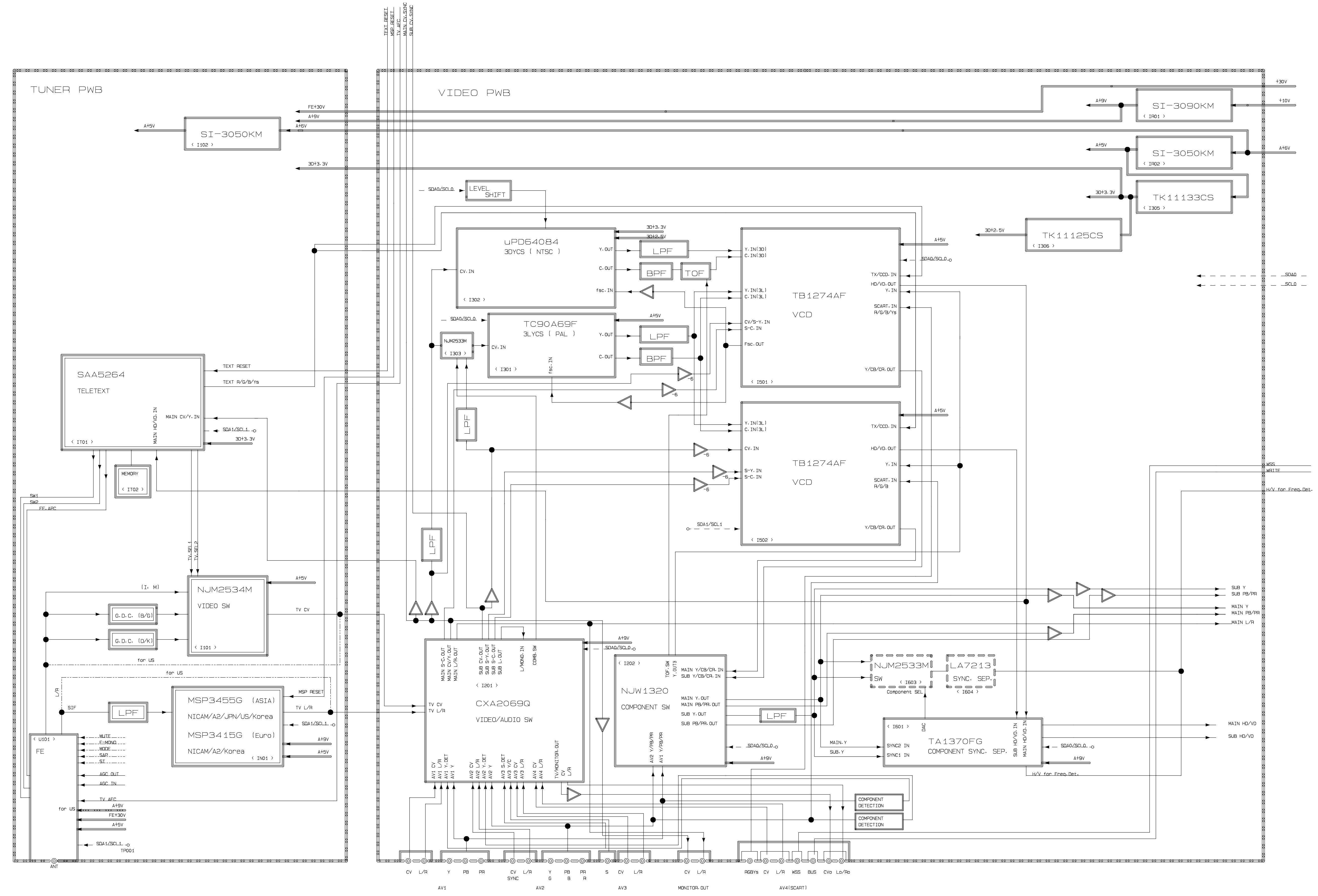
TUNER board (Side-B)



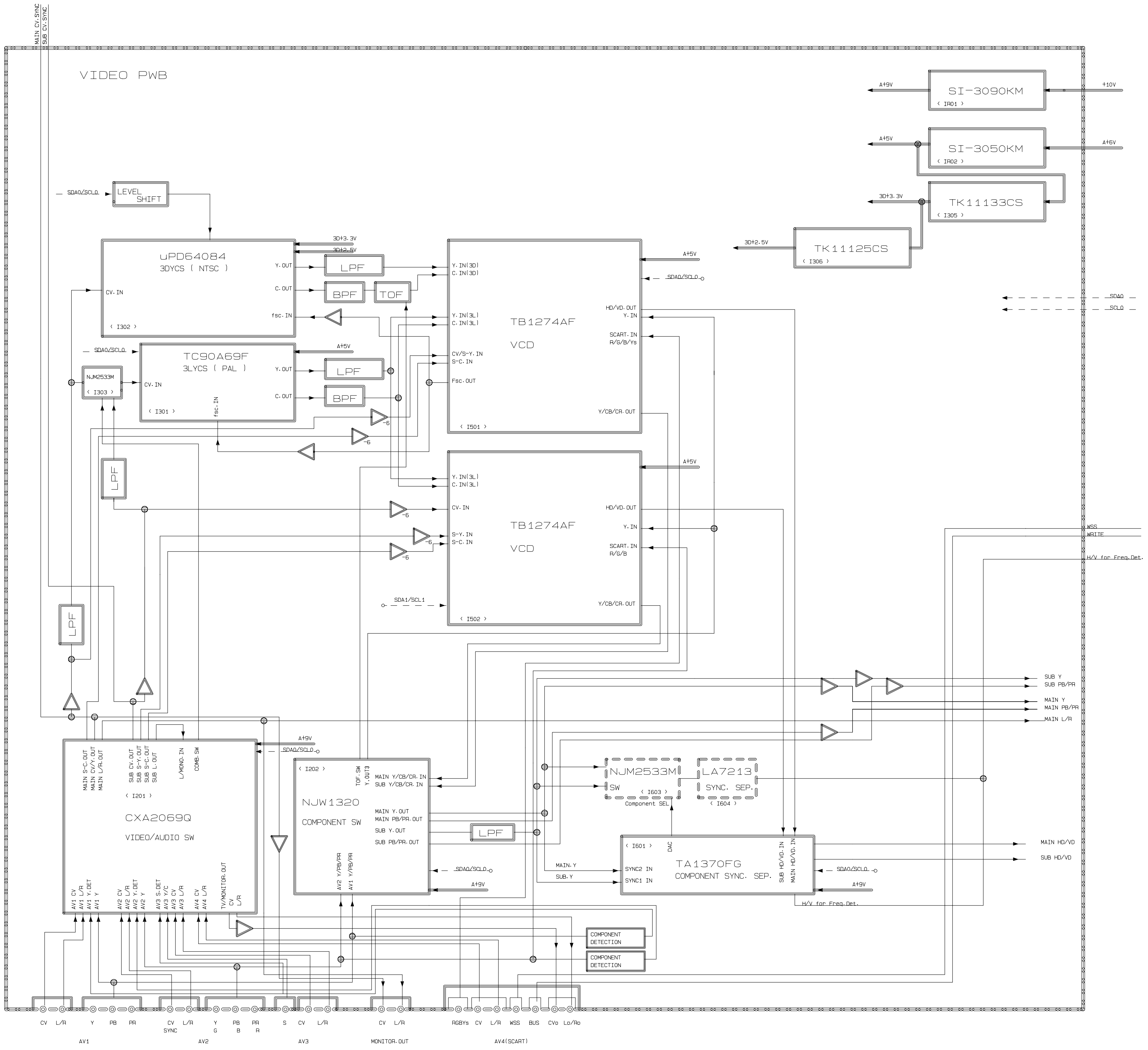
Mainly chip parts reference table

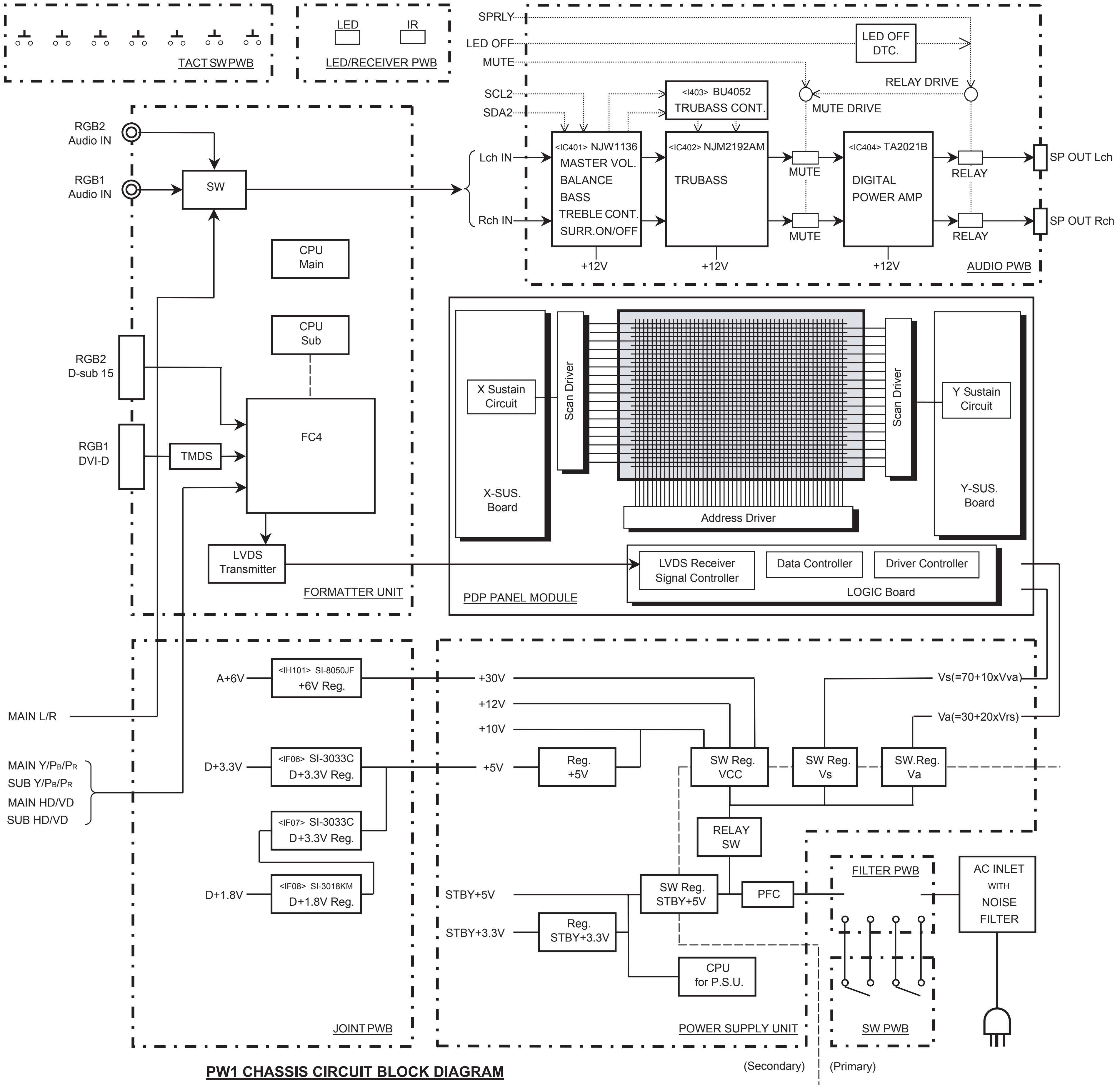
Cir.No.	Position
I101	E2
I102	B5
IC01	B5
IC02	D5
IC03	C4
IN01	E3
IT02	C1
L102	F3
L104	D3
LC01	B4
LC02	C5
LN01	E4
LN02	D4
LN03	E3
LT01	C3
LT02	A4
PTV2	D6
Q101	F3
Q102	F2
Q103	E2
Q104	F2
Q105	E2
Q106	D2
Q107	D2
Q108	F5
Q109	E5
QC01	D4
QC02	D5
QC03	B4
QC04	C4
QN01	D5
QN02	D5
QT01	B2
QT02	B1
QT03	B3
QT04	B3
QT05	B3
QT06	C3

11. Block diagram

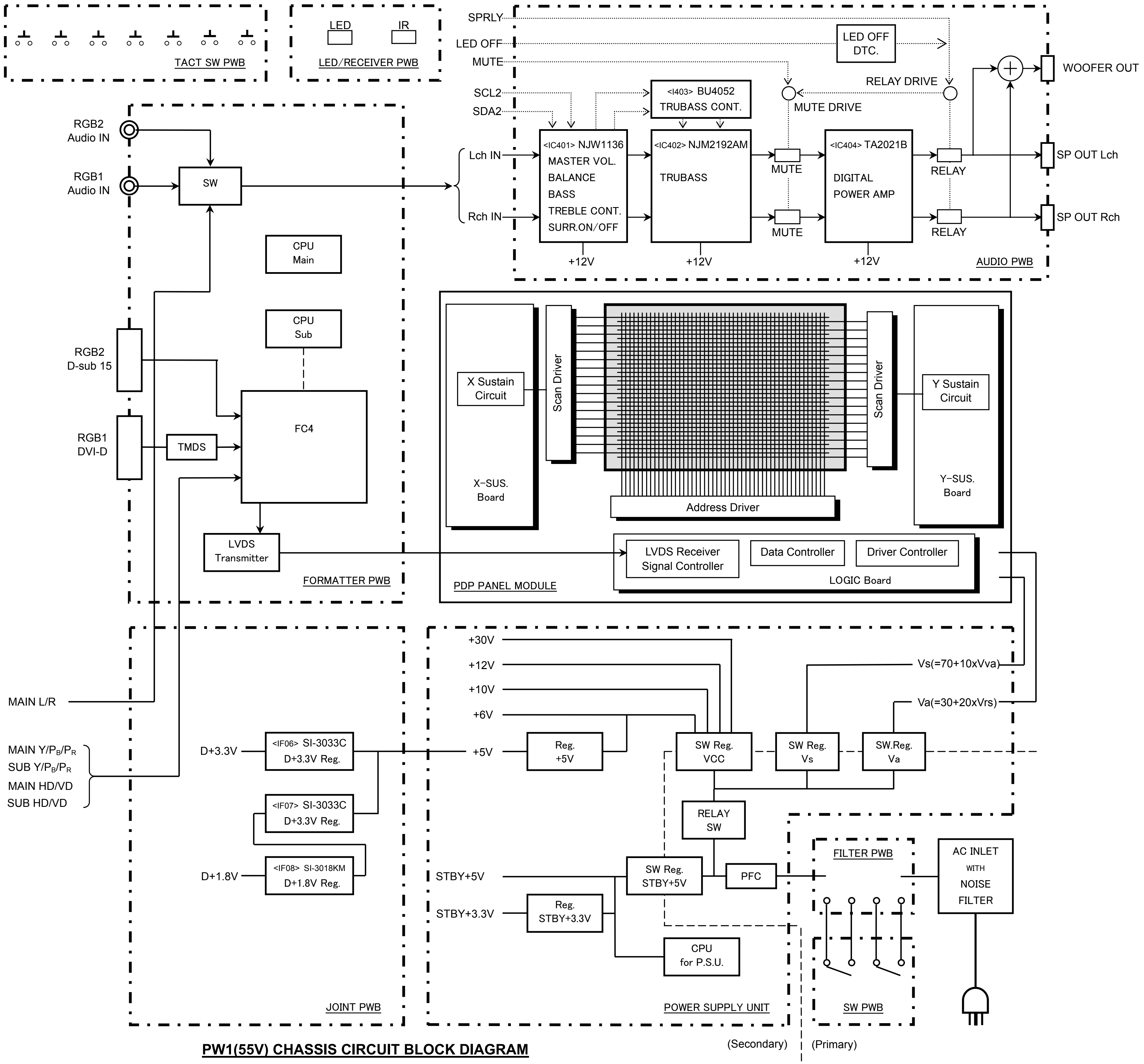

TUNER PWB
VIDEO PWB
SI-3050KM
(I102)
SAA5264
TELETEXT
(IT01)
MEMORY
(IT02)
NJM2534M
VIDEO SW
(I101)
G.D.C. (B/G)
G.D.C. (D/K)
MSP3455G (ASIA)
NICAM/A2/JPN/US/Korea
MSP3415G (Euro)
NICAM/A2/Korea
(IN01)
LPF
(U101)
FE
ANT
TP001
LEVEL SHIFT
uPD64084
3DYCS (NTSC)
(I302)
TC90A69F
3LYCS (PAL)
(I301)
NJM2533M
(I303)
BPF
TOF
TB1274AF
VCD
(I501)
(I502)
CXA2069Q
VIDEO/AUDIO SW
(I201)
NJW1320
COMPONENT SW
(I202)
NJM2533M
SW
(I603)
Component SEL
LA7213
SYNC. SEP.
(I604)
TA1370FG
COMPONENT SYNC. SEP.
(I601)
COMPONENT DETECTION
SI-3090KM
(IR01)
SI-3050KM
(IR02)
TK11133CS
(I305)
TK11125CS
(I306)
+30V
+10V
A+6V
A+9V
A+5V
3D+3.3V
3D+2.5V
FE+30V
TEXT RESET
MSP RESET
TV AFC
MAIN CV.SYNC
SUB CV.SYNC
SDA0/SCL0
SDA1/SCL1
SUB Y
SUB PB/PR
MAIN Y
MAIN PB/PR
MAIN L/R
MAIN HD/VD
SUB HD/VD
WSS
WRITE
H/V for Freq.Det.
CV L/R Y PB PR
AV1
CV L/R Y PB PR
SYNC G B R
AV2
S CV L/R
AV3
CV L/R
MONITOR-OUT
RGBYs CV L/R WSS BUS CVo Lo/Ro
AV4(SCART)

Block diagram


MAIN CV.SYNC
SUB CV.SYNC
VIDEO PWB
SDA0/SCL0
LEVEL SHIFT
uPD64084
3DYCS (NTSC)
CV.IN
Y.OUT
C.OUT
fsc.IN
< I302 >
3D+3.3V
3D+2.5V
LPF
BPF
TOF
TC90A69F
3LYCS (PAL)
A+5V
NJM2533M
< I303 >
< I301 >
fsc.IN
-6
TB1274AF
VCD
Y.IN(3D)
C.IN(3D)
Y.IN(3L)
C.IN(3L)
CV/S-Y.IN
S-C.IN
Fsc.OUT
HD/VD.OUT
Y.IN
SCART.IN
R/G/B/Ys
Y/CB/CR.OUT
< I501 >
CV.IN
S-Y.IN
R/G/B
SDA1/SCL1
< I502 >
SI-3090KM
< IR01 >
A+9V
+10V
SI-3050KM
< IR02 >
A+6V
TK11133CS
< I305 >
3D+3.3V
TK11125CS
< I306 >
3D+2.5V
SDA0
SCL0
WSS
WRITE
H/V for Freq.Det.
SUB Y
SUB PB/PR
MAIN Y
MAIN PB/PR
MAIN L/R
CXA2069Q
VIDEO/AUDIO SW
< I201 >
MAIN S-C.OUT
MAIN CV/Y.OUT
MAIN L/R.OUT
SUB CV.OUT
SUB S-Y.OUT
SUB S-C.OUT
SUB L.OUT
L/MONO.IN
COMB.SW
AV1 CV
AV1 L/R
AV1 Y.DET
AV1 Y
AV2 CV
AV2 L/R
AV2 Y.DET
AV2 Y
AV3 S.DET
AV3 Y/C
AV3 CV
AV3 L/R
AV4 CV
AV4 L/R
TV/MONITOR.OUT
CV
L/R
NJW1320
COMPONENT SW
< I202 >
TOF.SW
Y.OUT3
MAIN Y/CB/CR.IN
SUB Y/CB/CR.IN
MAIN Y.OUT
MAIN PB/PR.OUT
SUB Y.OUT
SUB PB/PR.OUT
AV2 Y/PB/PR
AV1 Y/PB/PR
NJM2533M
SW
< I603 >
Component SEL
LA7213
SYNC. SEP.
< I604 >
TA1370FG
COMPONENT SYNC. SEP.
< I601 >
DAC
SYNC2 IN
SYNC1 IN
MAIN.Y
SUB.Y
SUB HD/VD.IN
MAIN HD/VD.IN
MAIN HD/VD
SUB HD/VD
COMPONENT DETECTION
COMPONENT DETECTION
CV
L/R
Y
PB
PR
AV1
CV SYNC
L/R
Y G
PB B
PR R
AV2
S
CV
L/R
AV3
CV
L/R
MONITOR.OUT
RGBYs
CV
L/R
WSS
BUS
CVo
Lo/Ro
AV4(SCART)

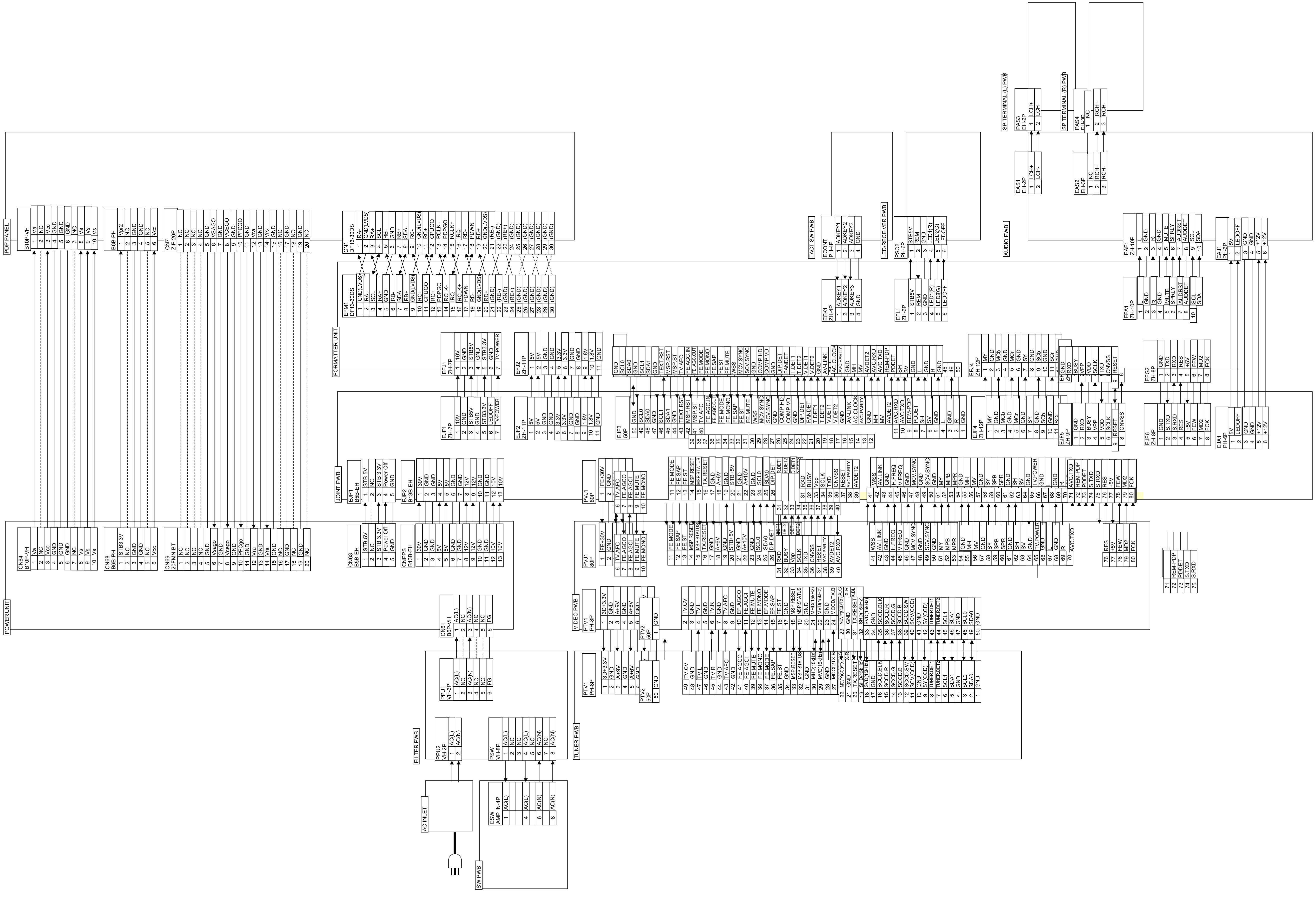

TACT SW PWB
LED
IR
LED/RECEIVER PWB
SPRLY
LED OFF
MUTE
LED OFF DTC.
RELAY DRIVE
MUTE DRIVE
SCL2
SDA2
<I403> BU4052
TRUBASS CONT.
<IC401> NJW1136
MASTER VOL.
BALANCE
BASS
TREBLE CONT.
SURR.ON/OFF
<IC402> NJM2192AM
TRUBASS
<IC404> TA2021B
DIGITAL POWER AMP
Lch IN
Rch IN
MUTE
MUTE
RELAY
RELAY
SP OUT Lch
SP OUT Rch
+12V
+12V
+12V
AUDIO PWB
RGB2 Audio IN
RGB1 Audio IN
SW
CPU Main
CPU Sub
RGB2 D-sub 15
RGB1 DVI-D
TMDS
FC4
LVDS Transmitter
FORMATTER UNIT
X Sustain Circuit
X-SUS. Board
Scan Driver
Scan Driver
Y Sustain Circuit
Y-SUS. Board
Address Driver
LVDS Receiver Signal Controller
Data Controller
Driver Controller
LOGIC Board
PDP PANEL MODULE
MAIN L/R
MAIN Y/PB/PR
SUB Y/PB/PR
MAIN HD/VD
SUB HD/VD
A+6V
<IH101> SI-8050JF
+6V Reg.
D+3.3V
<IF06> SI-3033C
D+3.3V Reg.
<IF07> SI-3033C
D+3.3V Reg.
D+1.8V
<IF08> SI-3018KM
D+1.8V Reg.
JOINT PWB
+30V
+12V
+10V
+5V
Vs(=70+10xVva)
Va(=30+20xVrs)
Reg. +5V
SW Reg. VCC
SW Reg. Vs
SW.Reg. Va
RELAY SW
STBY+5V
SW Reg. STBY+5V
PFC
STBY+3.3V
Reg. STBY+3.3V
CPU for P.S.U.
POWER SUPPLY UNIT
FILTER PWB
AC INLET WITH NOISE FILTER
SW PWB
(Secondary)
(Primary)

PW1 CHASSIS CIRCUIT BLOCK DIAGRAM

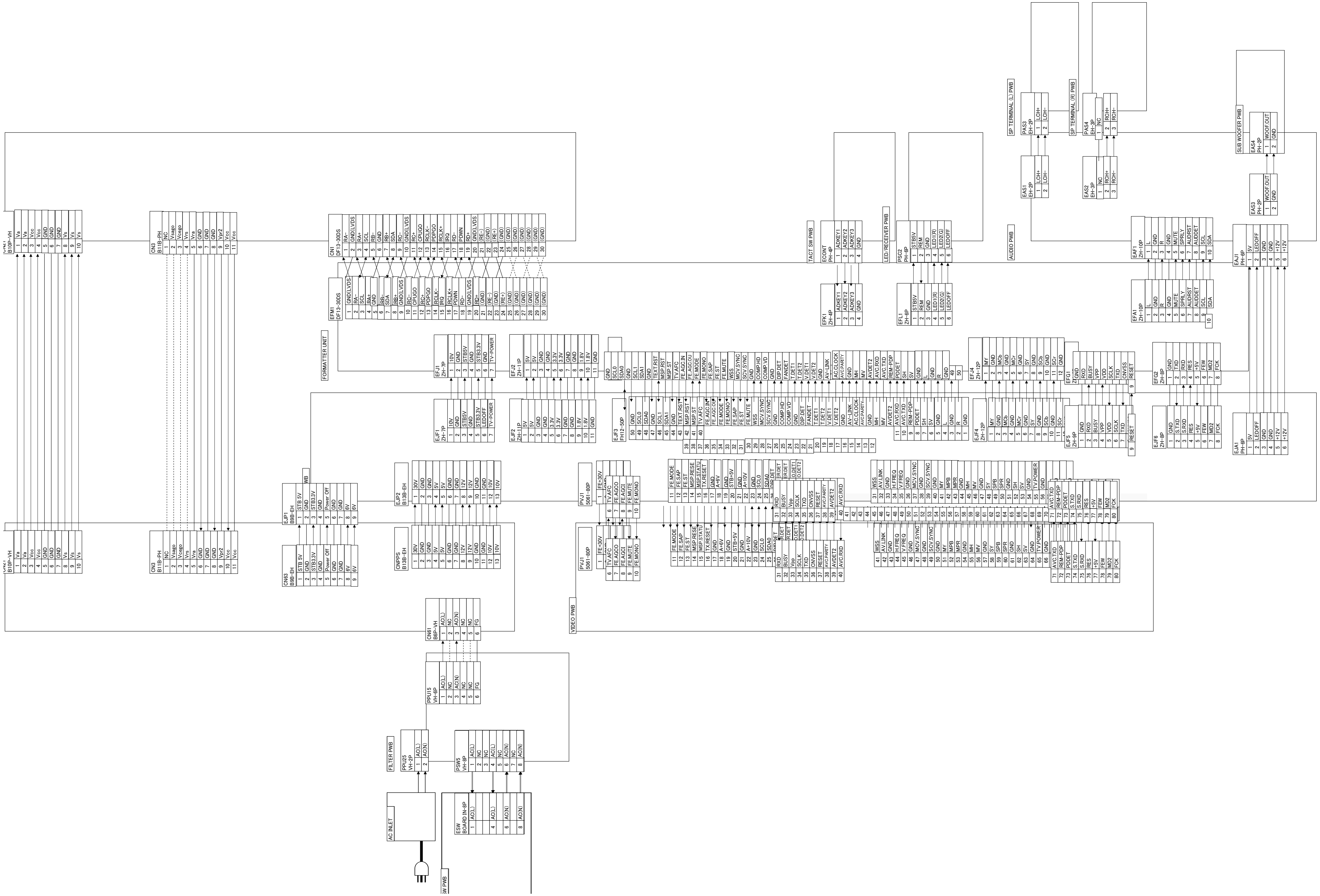

TACT SW PWB
LED
IR
LED/RECEIVER PWB
SPRLY
LED OFF
MUTE
SCL2
SDA2
LED OFF DTC.
WOOFER OUT
RELAY DRIVE
<I403> BU4052
TRUBASS CONT.
MUTE DRIVE
Lch IN
Rch IN
<IC401> NJW1136
MASTER VOL.
BALANCE
BASS
TREBLE CONT.
SURR.ON/OFF
<IC402> NJM2192AM
TRUBASS
MUTE
MUTE
<IC404> TA2021B
DIGITAL
POWER AMP
RELAY
RELAY
SP OUT Lch
SP OUT Rch
+12V
+12V
+12V
AUDIO PWB
RGB2 Audio IN
RGB1 Audio IN
SW
CPU Main
CPU Sub
RGB2 D-sub 15
RGB1 DVI-D
TMDS
FC4
LVDS Transmitter
FORMATTER PWB
X Sustain Circuit
X-SUS. Board
Scan Driver
Scan Driver
Y Sustain Circuit
Y-SUS. Board
Address Driver
LVDS Receiver
Signal Controller
Data Controller
Driver Controller
LOGIC Board
PDP PANEL MODULE
MAIN L/R
MAIN Y/PB/PR
SUB Y/PB/PR
MAIN HD/VD
SUB HD/VD
D+3.3V
<IF06> SI-3033C
D+3.3V Reg.
<IF07> SI-3033C
D+3.3V Reg.
D+1.8V
<IF08> SI-3018KM
D+1.8V Reg.
JOINT PWB
+30V
+12V
+10V
+6V
+5V
Reg. +5V
SW Reg. VCC
SW Reg. Vs
SW.Reg. Va
Vs(=70+10xVva)
Va(=30+20xVrs)
RELAY SW
STBY+5V
SW Reg. STBY+5V
PFC
STBY+3.3V
Reg. STBY+3.3V
CPU for P.S.U.
POWER SUPPLY UNIT
FILTER PWB
AC INLET WITH NOISE FILTER
SW PWB
(Secondary)
(Primary)

PW1(55V) CHASSIS CIRCUIT BLOCK DIAGRAM

12. Connection diagram

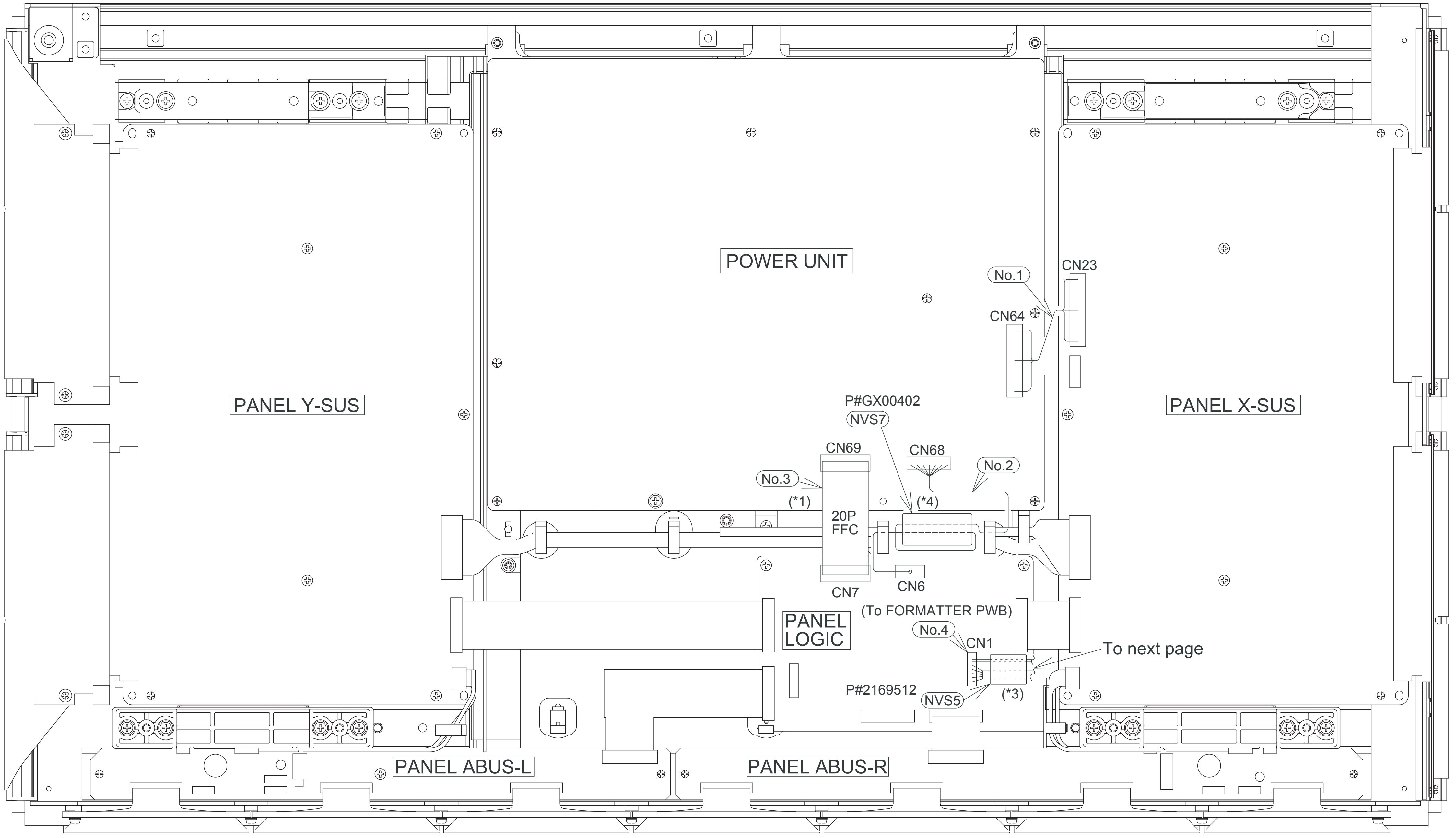

PDP PANEL
B10P-VH
B6B-PH
CN7 20P
CN1 DF13-30DS
EFM1 DF13-30DS
FORMATTER UNIT
EFJ1 ZH-7P
EFJ2 ZH-11P
EFJ3 50P
EFJ4 ZH-12P
EFJ5 ZH-8P
EFG2 ZH-8P
EFJ6 ZH-8P
TACT SW PWB
ECONT PH-4P
EFK1 ZH-4P
LED/RECEIVER PWB
PSC2 PH-6P
EFL1 ZH-6P
AUDIO PWB
EAF1 ZH-10P
EFA1 ZH-10P
EAJ1 PH-6P
EJA1 PH-6P
EAS1 EH-2P
EAS2 EH-3P
SP TERMINAL (L) PWB
PAS3 EH-2P
SP TERMINAL (R) PWB
PAS4 EH-3P
JOINT PWB
EJP1 B5B-EH
EJP2 B13B-EH
PVJ1 80P
POWER UNIT
CN64 B10P-VH
CN68 B6B-PH
CN69 20FMN-BT
CN63 B5B-EH
CNPPS B13B-EH
CN61 B6P-VH
VIDEO PWB
PJV1 80P
PTV1 PH-8P
PTV2 50P
TUNER PWB
FILTER PWB
PPU1 VH-6P
PPU2 VH-2P
PSW VH-8P
SW PWB
ESW AMP IN-4P
AC INLET

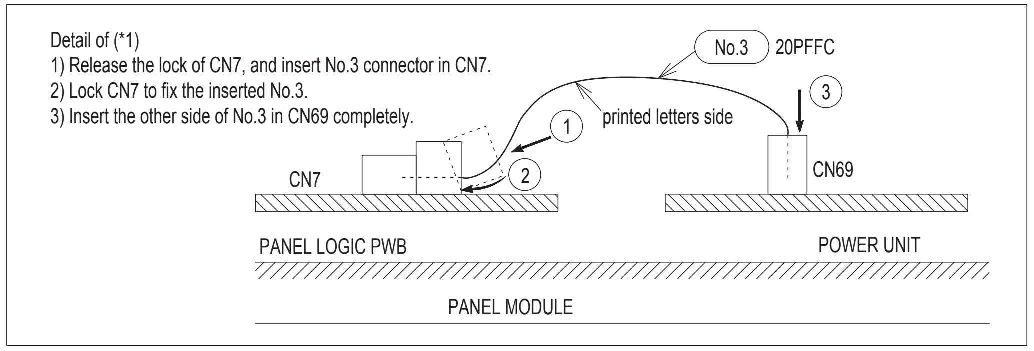
12. Connection diagram


FORMATTER UNIT
TACT SW PWB
LED/RECEIVER PWB
AUDIO PWB
SP TERMINAL (L) PWB
SP TERMINAL (R) PWB
SUB WOOFER PWB
VIDEO PWB
FILTER PWB
AC INLET
SW PWB

13. Wiring diagram

[32PD5000]


POWER UNIT
PANEL Y-SUS
PANEL X-SUS
No.1
CN23
CN64
P#GX00402
NVS7
CN69
CN68
No.3
No.2
(*1)
(*4)
20P
FFC
CN7
CN6
(To FORMATTER PWB)
PANEL
LOGIC
No.4
CN1
To next page
P#2169512
NVS5
(*3)
PANEL ABUS-L
PANEL ABUS-R

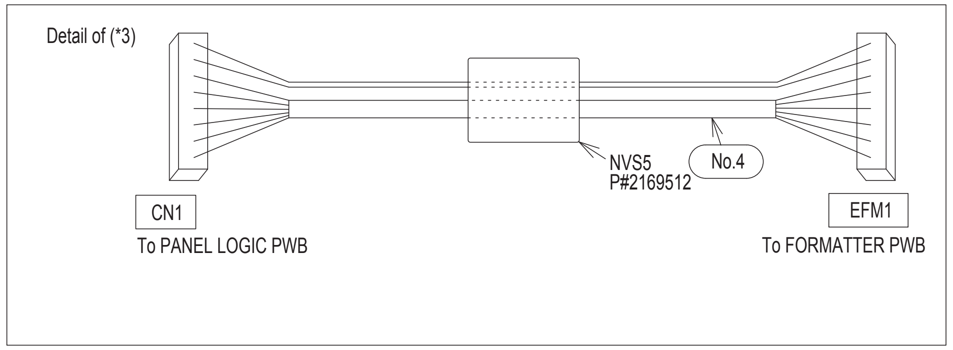

Detail of (*1)

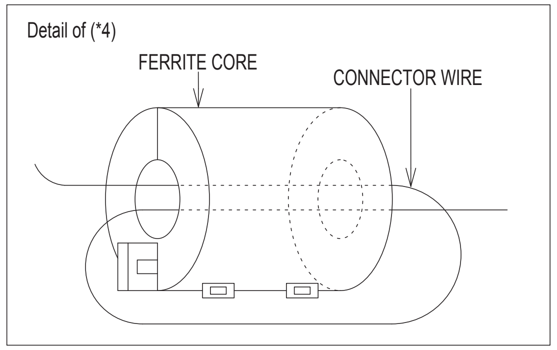
1) Release the lock of CN7, and insert No.3 connector in CN7.

2) Lock CN7 to fix the inserted No.3.

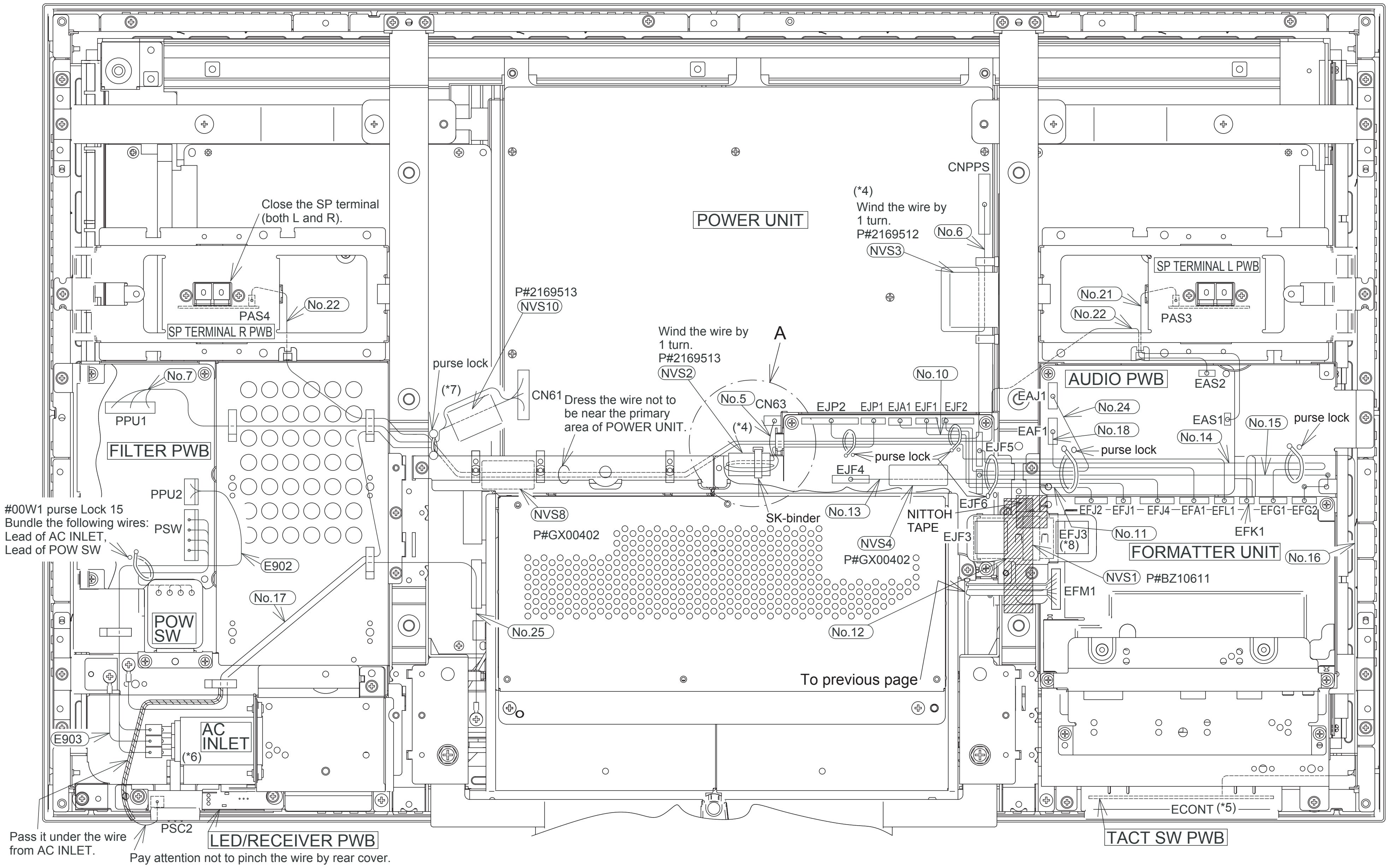
3) Insert the other side of No.3 in CN69 completely.

No.3
20PFFC
③
①
printed letters side
②
CN7
CN69
PANEL LOGIC PWB
POWER UNIT
PANEL MODULE


Detail of (*3)
NVS5
P#2169512
No.4
CN1
To PANEL LOGIC PWB
EFM1
To FORMATTER PWB


Detail of (*4)
FERRITE CORE
CONNECTOR WIRE

[32PD5000]



Close the SP terminal (both L and R).

Wind the wire by 1 turn. P#2169512

Wind the wire by 1 turn. P#2169513

Dress the wire not to be near the primary area of POWER UNIT.

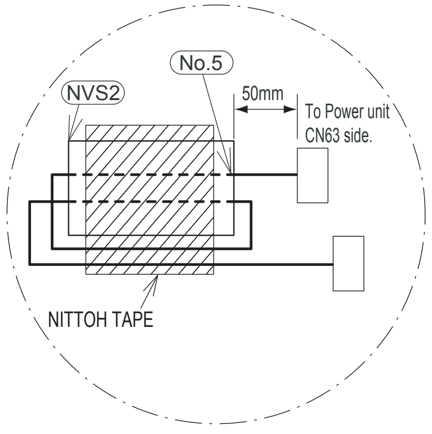
#00W1 purse Lock 15 Bundle the following wires: Lead of AC INLET, Lead of POW SW

Pass it under the wire from AC INLET.

Pay attention not to pinch the wire by rear cover.

To previous page

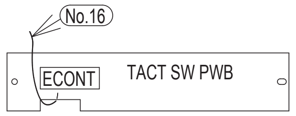
POWER UNIT
CNPPS
(*4)
No.6
NVS3
SP TERMINAL L PWB
No.21
No.22
PAS3
PAS4
No.22
SP TERMINAL R PWB
P#2169513
NVS10
A
NVS2
No.10
purse lock
(*7)
CN61
No.7
PPU1
FILTER PWB
No.5
CN63
EJP2
EJP1
EJA1
EJF1
EJF2
EAJ1
AUDIO PWB
EAS2
No.24
EAS1
No.15
purse lock
EAF1
No.18
No.14
purse lock
EJF5
(*4)
EJF4
purse lock
PPU2
PSW
NVS8
P#GX00402
SK-binder
No.13
NITTOH TAPE
EJF6
EJF3
EFJ2
EFJ1
EFJ4
EFA1
EFL1
EFG1
EFG2
EFK1
EFJ3
(*8)
No.11
FORMATTER UNIT
No.16
NVS4
P#GX00402
NVS1
P#BZ10611
EFM1
E902
No.17
POW SW
No.25
No.12
E903
AC INLET
(*6)
PSC2
LED/RECEIVER PWB
ECONT (*5)
TACT SW PWB



No.5
NVS2
50mm
To Power unit CN63 side.
NITTOH TAPE

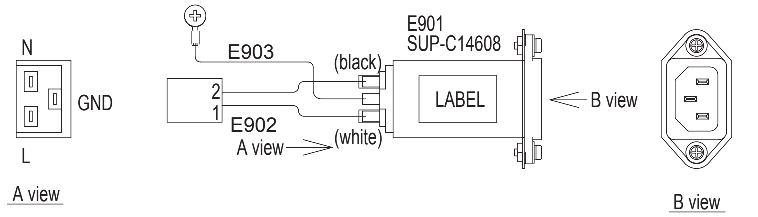
Detail of A

Detail of (*5)



No.16
ECONT
TACT SW PWB

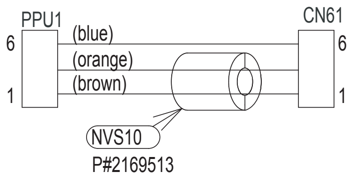
Detail of (*6)



N
GND
L
A view
E903
E901
SUP-C14608
(black)
LABEL
B view
2
1
E902
A view
(white)
B view

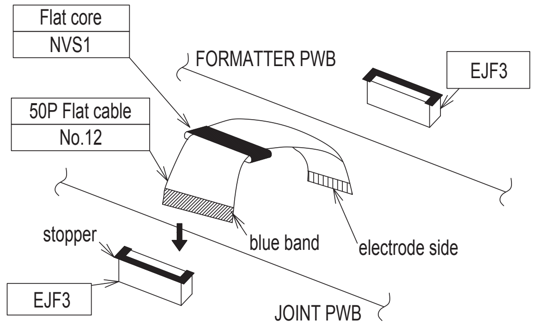
Faston connector with Lock:
Connect it completely to be locked.
Disconnect it pushing the button to release the lock.

Detail of (*7)



PPU1
6
1
(blue)
(orange)
(brown)
CN61
6
1
NVS10
P#2169513

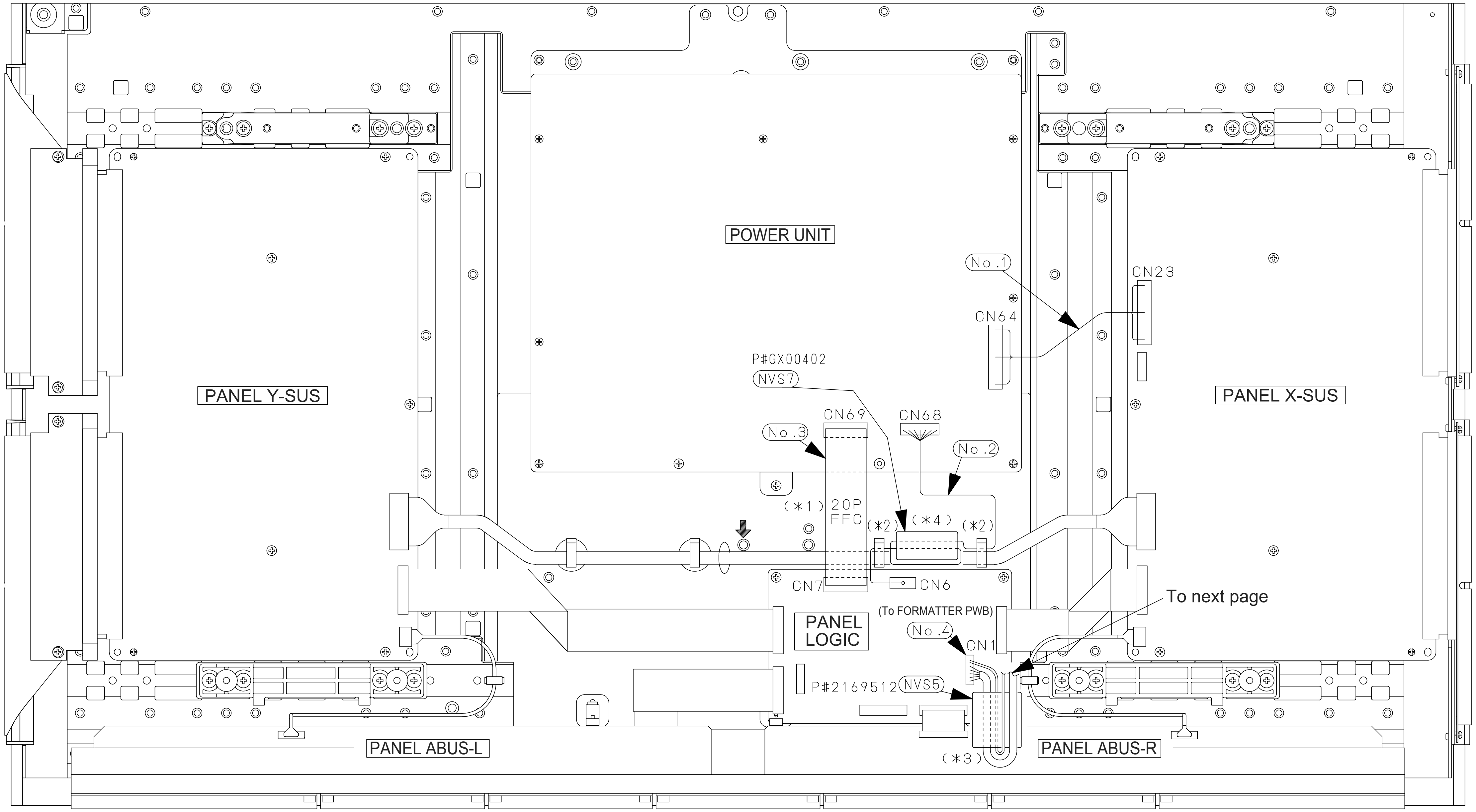
Detail of (*8)
Pass No.12 connector through NVS1.
Insert it in EJF3/EFJ3 and push the stopper down to lock.

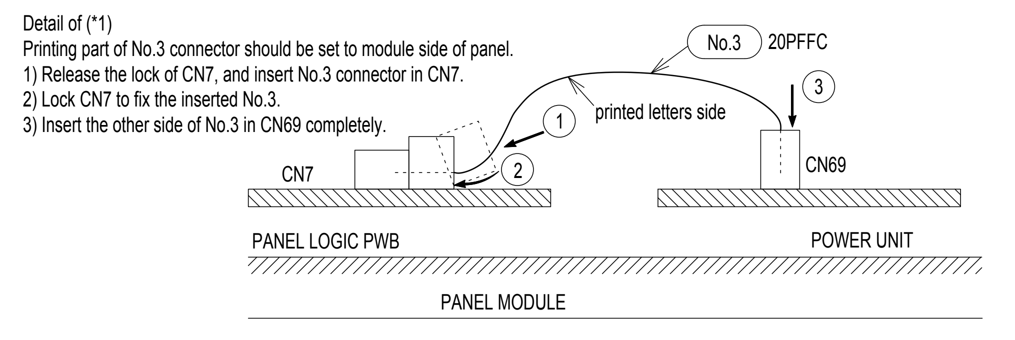


Flat core
NVS1
FORMATTER PWB
EJF3
50P Flat cable
No.12
stopper
blue band
electrode side
EJF3
JOINT PWB

Wiring diagram

37PD5000 1/2


POWER UNIT
No.1
CN23
CN64
P#GX00402
NVS7
PANEL Y-SUS
PANEL X-SUS
CN69
CN68
No.3
No.2
(*1) 20P FFC
(*2)
(*4)
(*2)
CN7
CN6
To next page
PANEL LOGIC
(To FORMATTER PWB)
No.4
CN1
P#2169512
NVS5
PANEL ABUS-L
PANEL ABUS-R
(*3)


Detail of (*1)

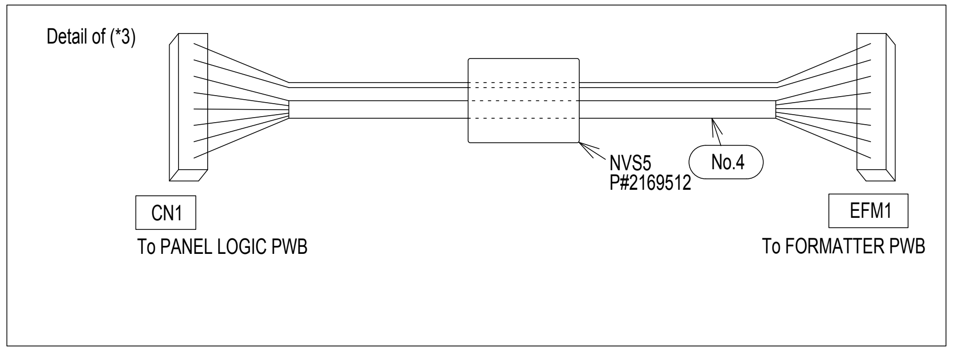
Printing part of No.3 connector should be set to module side of panel.

1) Release the lock of CN7, and insert No.3 connector in CN7.

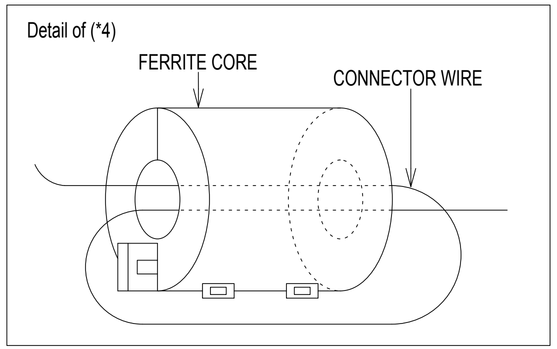
2) Lock CN7 to fix the inserted No.3.

3) Insert the other side of No.3 in CN69 completely.

No.3
20PFFC
3
1
printed letters side
2
CN7
CN69
PANEL LOGIC PWB
POWER UNIT
PANEL MODULE

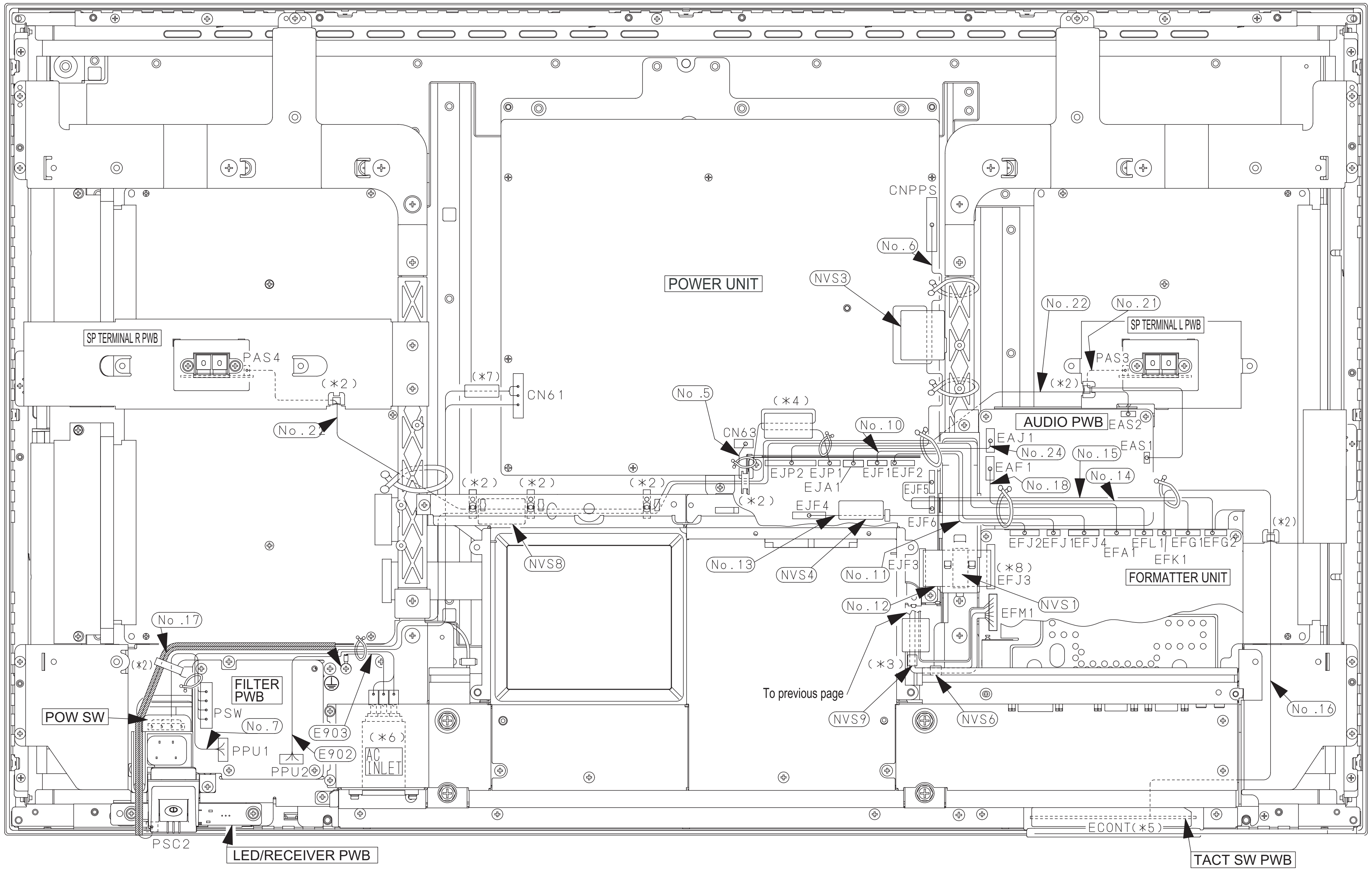

Detail of (*3)

NVS5
P#2169512
No.4
CN1
To PANEL LOGIC PWB
EFM1
To FORMATTER PWB

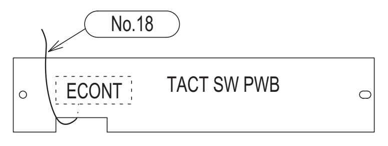

Detail of (*4)

FERRITE CORE
CONNECTOR WIRE

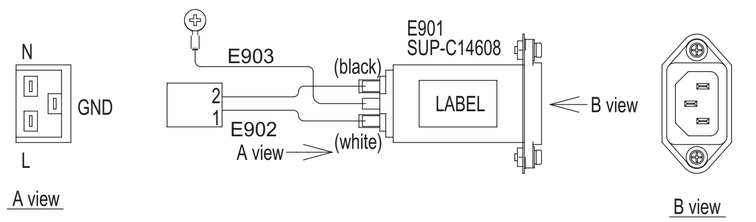
Wiring diagram 2/2


POWER UNIT
CNPPS
No.6
NVS3
No.22
No.21
SP TERMINAL L PWB
PAS3
(*2)
SP TERMINAL R PWB
PAS4
(*2)
No.2
(*7)
CN61
No.5
(*4)
CN63
No.10
AUDIO PWB
EAS2
EAJ1
No.24
No.15
EAS1
EAF1
No.14
No.18
EJP2
EJP1
EJF1
EJF2
EJA1
EJF5
(*2)
(*2)
(*2)
(*2)
EJF4
EJF6
(*2)
EFJ2
EFJ1
EFJ4
EFA1
EFL1
EFG1
EFG2
EFK1
NVS8
No.13
NVS4
No.11
EJF3
(*8)
EFJ3
FORMATTER UNIT
No.12
NVS1
EFM1
No.17
(*2)
FILTER PWB
PSW
POW SW
No.7
E903
PPU1
E902
PPU2
(*6)
AC INLET
(*3)
To previous page
NVS9
NVS6
No.16
PSC2
LED/RECEIVER PWB
ECONT(*5)
TACT SW PWB

Detail of (*5)

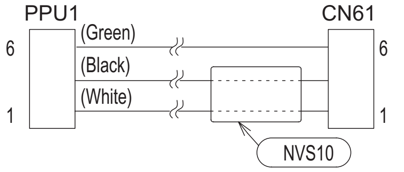

No.18
ECONT
TACT SW PWB

Detail of (*6)

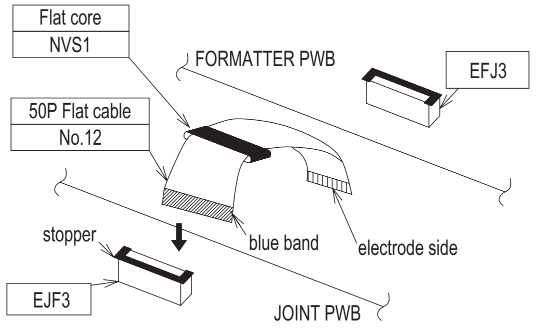

N
GND
L
A view
E903
E901
SUP-C14608
(black)
2
1
E902
LABEL
B view
A view
(white)
B view

Faston connector with Lock:
Connect it completely to be locked.
Disconnect it pushing the button to release the lock.

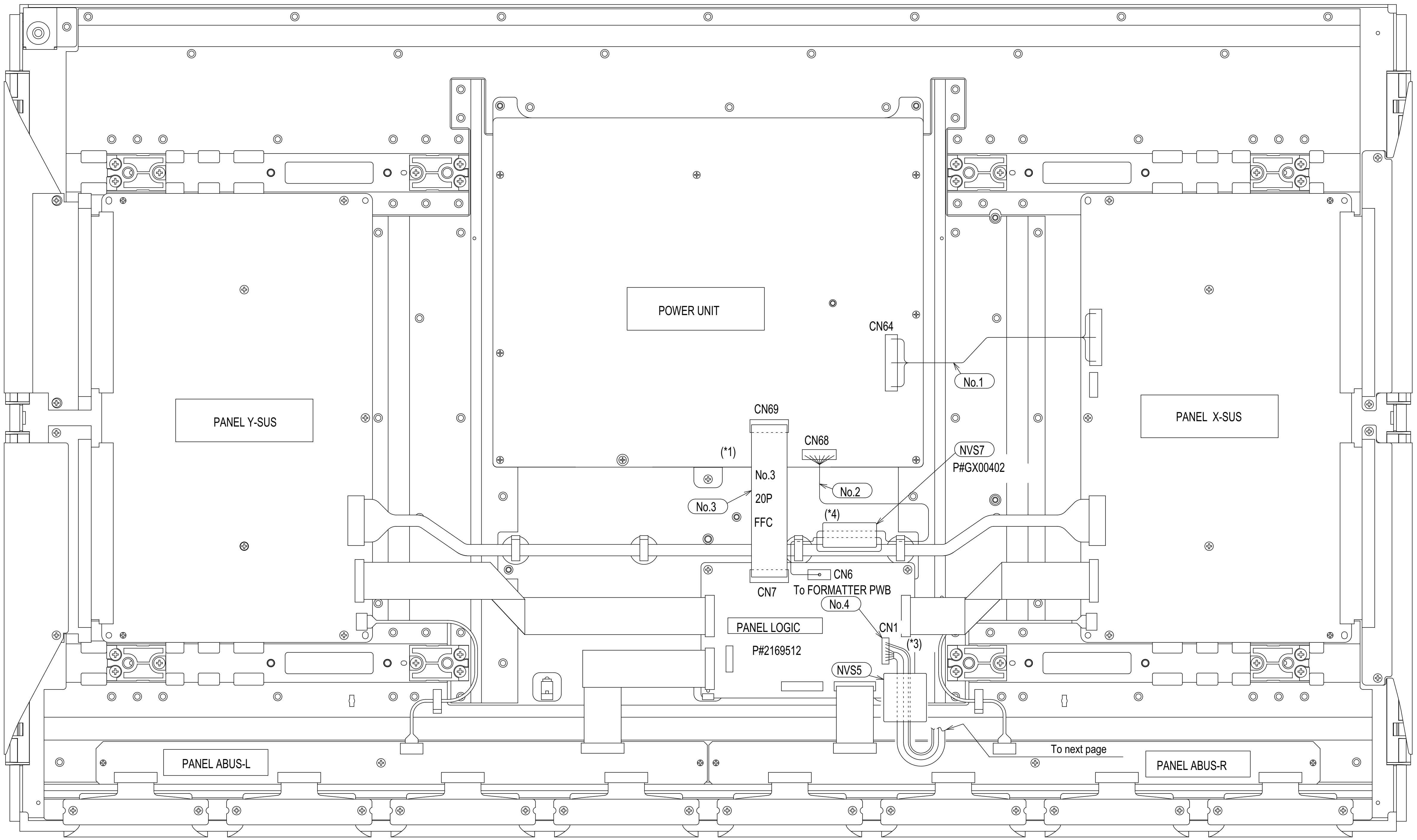
Detail of (*7)


PPU1
CN61
6
(Green)
(Black)
(White)
1
6
1
NVS10

Detail of (*8)
Pass No.12 connector through NVS1.
Insert it in EJF3/EFJ3 and push the stopper down to lock.

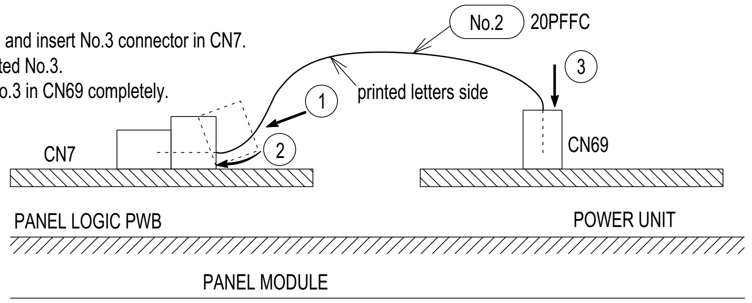

Flat core
NVS1
FORMATTER PWB
EFJ3
50P Flat cable
No.12
stopper
blue band
electrode side
EJF3
JOINT PWB

[42PD5000]

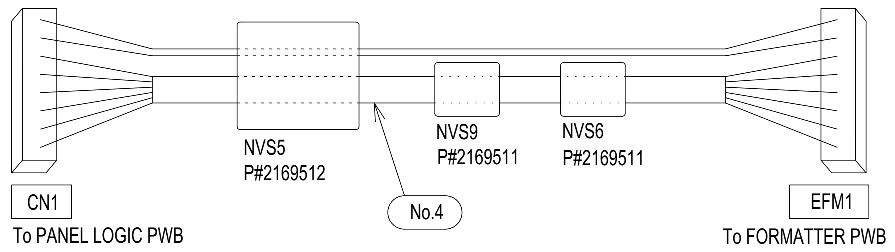

POWER UNIT
CN64
No.1
PANEL Y-SUS
PANEL X-SUS
CN69
CN68
(*1)
No.3
20P
FFC
No.3
No.2
NVS7
P#GX00402
(*4)
CN6
To FORMATTER PWB
CN7
No.4
PANEL LOGIC
P#2169512
CN1
(*3)
NVS5
To next page
PANEL ABUS-L
PANEL ABUS-R

Detail of (*1)

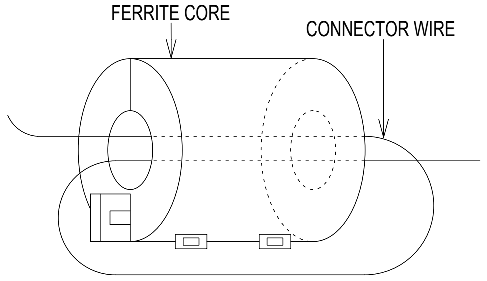
1) Release the lock of CN7, and insert No.3 connector in CN7.
2) Lock CN7 to fix the inserted No.3.
3) Insert the other side of No.3 in CN69 completely.


No.2
20PFFC
3
1
printed letters side
2
CN7
CN69
PANEL LOGIC PWB
POWER UNIT
PANEL MODULE

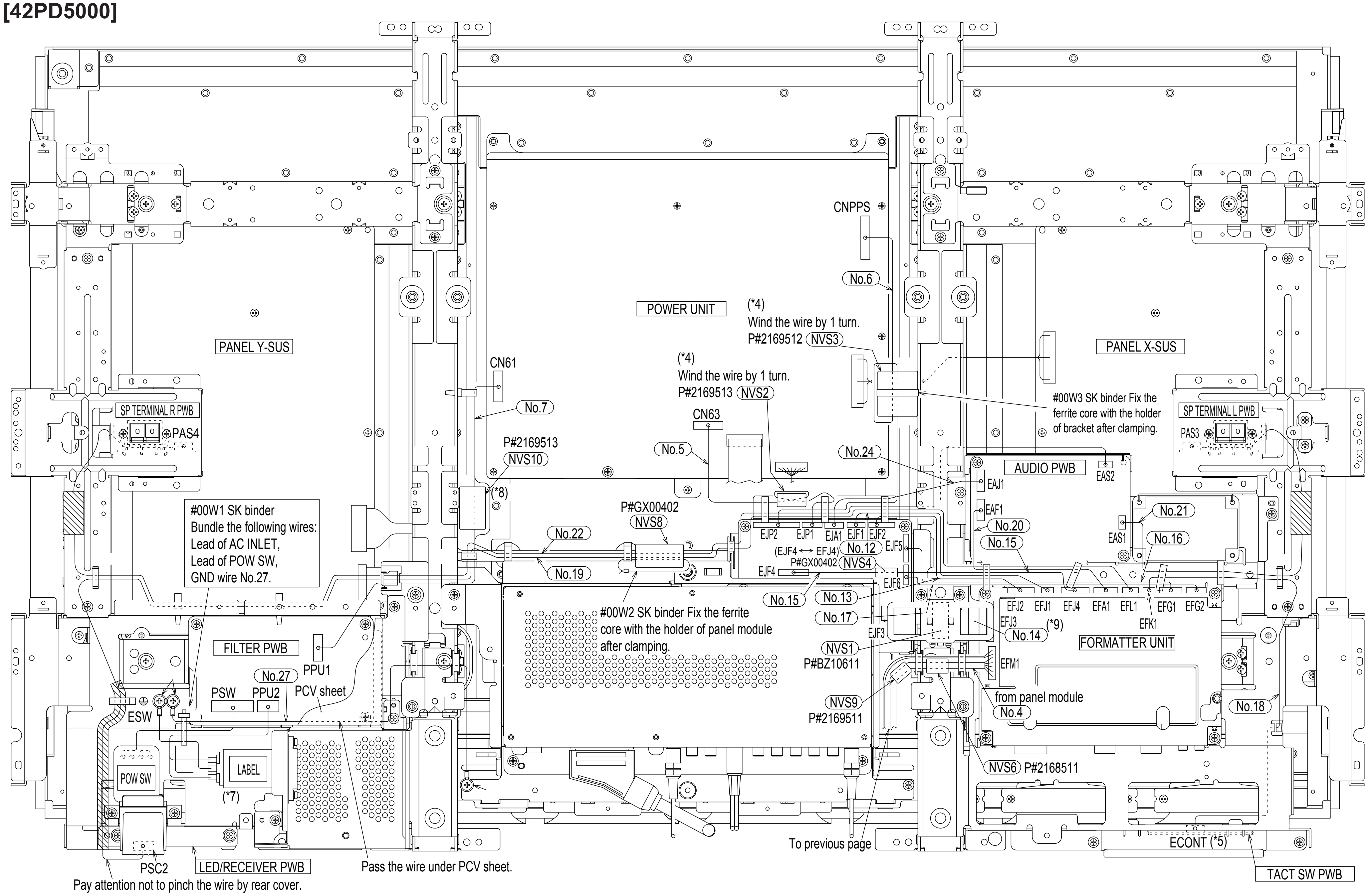
Detail of (*3)


NVS5
P#2169512
NVS9
P#2169511
NVS6
P#2169511
No.4
CN1
To PANEL LOGIC PWB
EFM1
To FORMATTER PWB

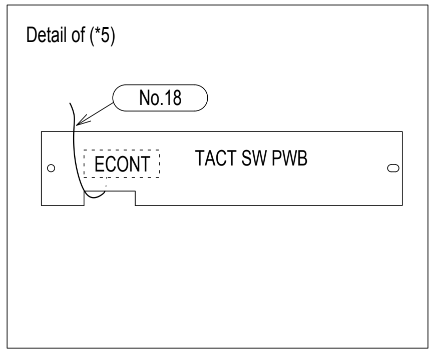
Detail of (*4)


FERRITE CORE
CONNECTOR WIRE

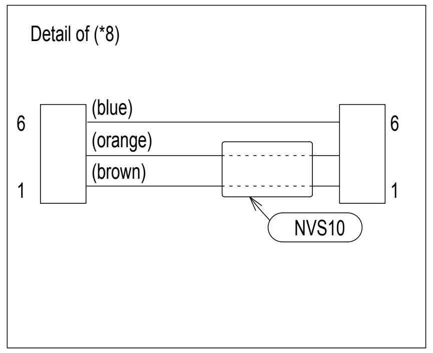
[42PD5000]


CNPPS
No.6
POWER UNIT
(*4)
Wind the wire by 1 turn.
P#2169512 NVS3
PANEL Y-SUS
PANEL X-SUS
CN61
(*4)
Wind the wire by 1 turn.
P#2169513 NVS2
No.7
CN63
#00W3 SK binder Fix the ferrite core with the holder of bracket after clamping.
SP TERMINAL R PWB
PAS4
SP TERMINAL L PWB
PAS3
P#2169513
NVS10
No.5
No.24
AUDIO PWB
EAS2
EAJ1
EAF1
(*8)
#00W1 SK binder
Bundle the following wires:
Lead of AC INLET,
Lead of POW SW,
GND wire No.27.
P#GX00402
NVS8
No.22
No.19
EJP2
EJP1
EJA1
EJF1
EJF2
EJF5
(EJF4 ←→ EFJ4)
No.12
P#GX00402
NVS4
EJF4
EJF6
No.20
No.15
No.21
EAS1
No.16
No.15
No.13
No.17
EFJ2
EFJ1
EFJ4
EFA1
EFL1
EFG1
EFG2
EFJ3
(*9)
EFK1
No.14
FORMATTER UNIT
EJF3
NVS1
P#BZ10611
#00W2 SK binder Fix the ferrite core with the holder of panel module after clamping.
FILTER PWB
PPU1
No.27
PSW
PPU2
PCV sheet
ESW
EFM1
from panel module
No.4
NVS9
P#2169511
No.18
NVS6
P#2168511
POW SW
LABEL
(*7)
To previous page
ECONT (*5)
PSC2
LED/RECEIVER PWB
Pass the wire under PCV sheet.
TACT SW PWB
Pay attention not to pinch the wire by rear cover.

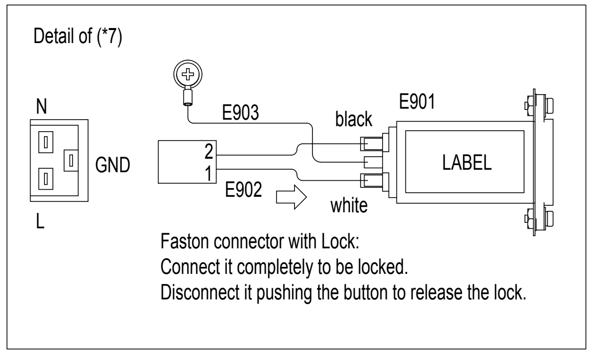
Detail of (*5)


No.18
ECONT
TACT SW PWB

Detail of (*8)


6
(blue)
(orange)
(brown)
1
6
1
NVS10

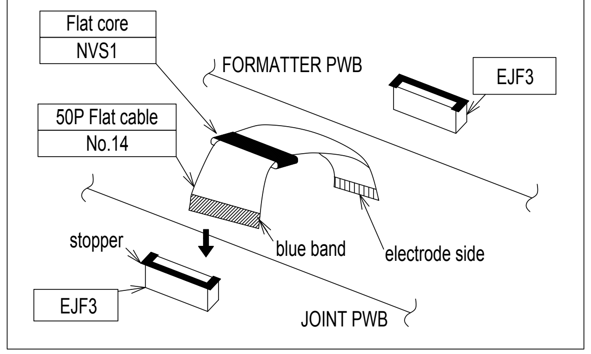
Detail of (*7)


N
GND
L
E903
black
E901
2
1
E902
white
LABEL

Faston connector with Lock:
Connect it completely to be locked.
Disconnect it pushing the button to release the lock.

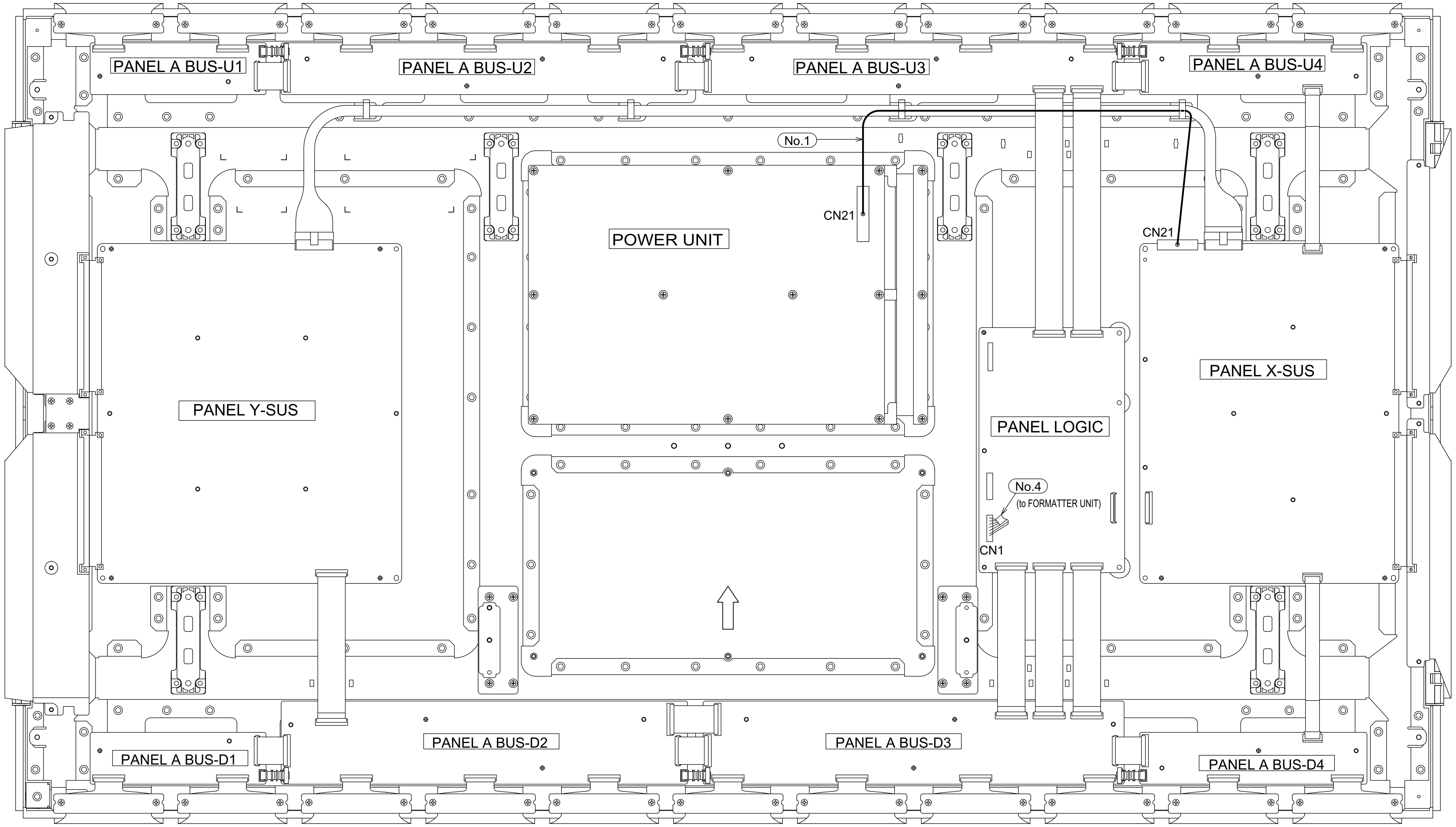
Detail of (*9)

Pass No.14 connector through NVS1.
Insert it in EJF3/EFJ3 and push the stopper down to lock.


Flat core
NVS1
FORMATTER PWB
EJF3
50P Flat cable
No.14
stopper
blue band
electrode side
EJF3
JOINT PWB

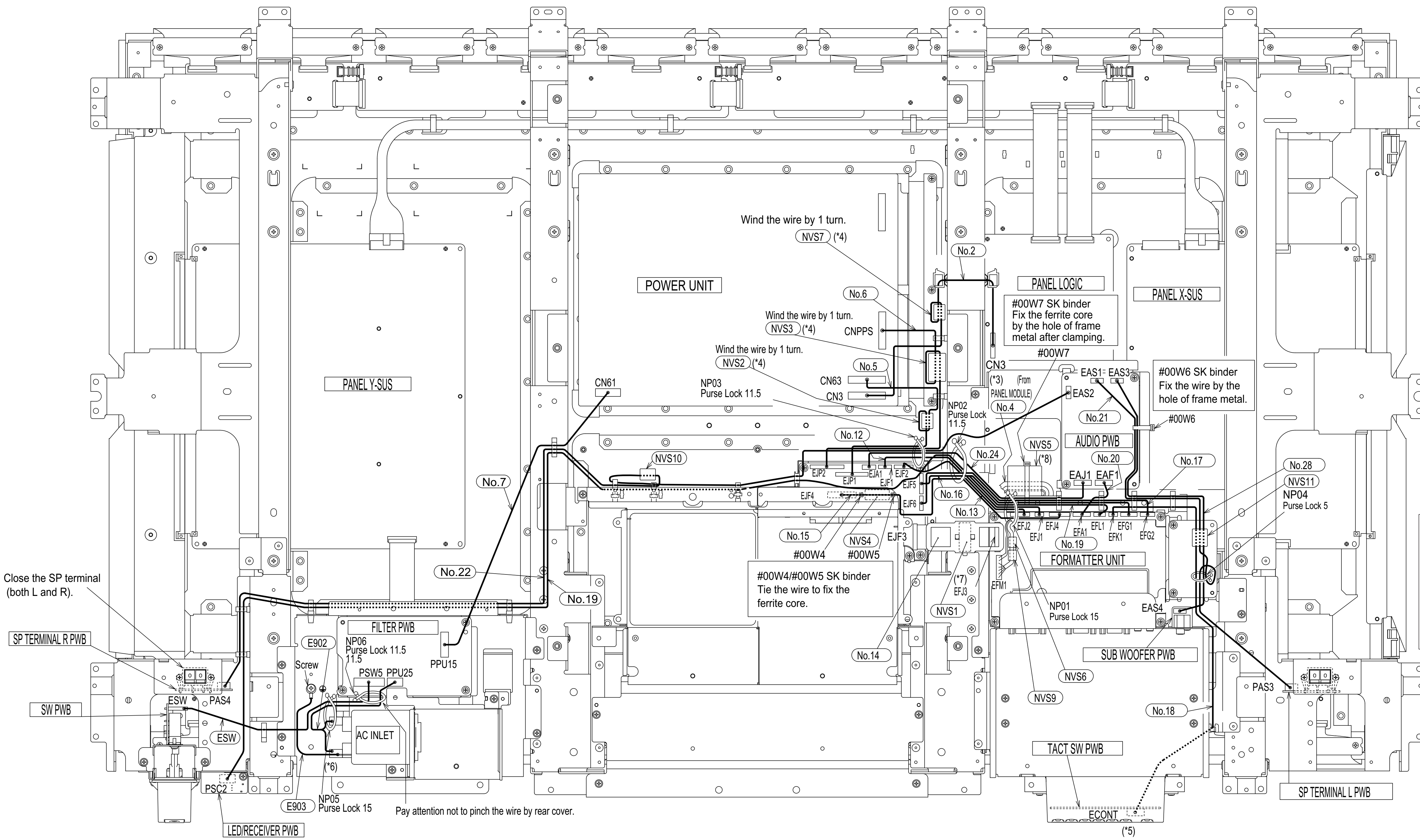
Wiring diagram

Wiring diagram 1/2


PANEL A BUS-U1
PANEL A BUS-U2
PANEL A BUS-U3
PANEL A BUS-U4
No.1
CN21
POWER UNIT
CN21
PANEL Y-SUS
PANEL X-SUS
PANEL LOGIC
No.4
(to FORMATTER UNIT)
CN1
PANEL A BUS-D1
PANEL A BUS-D2
PANEL A BUS-D3
PANEL A BUS-D4

From		Connector Wire	To	
Connecting Point	P.W.B.		Connecting Point	P.W.B.
CN21	POWER	NO1	CN21	PANEL X-SUS
CN3	POWER	NO2	CN3	PANEL LOGIC
EFM1	FORMATTER	NO4	CN1	PANEL LOGIC
CN63	POWER	NO5	EJP1	JOINT
CNPPS	POWER	NO6	EJP2	JOINT
CN61	POWER	NO7	PPU15	FILTER
EJF1	JOINT	NO12	EFJ1	FORMATTER
EJF2	JOINT	NO13	EFJ2	FORMATTER
EJF3	JOINT	NO14	EFJ3	FORMATTER
EJF4	JOINT	NO15	EFJ4	FORMATTER
EFG1	FORMATTER	NO16	EJF5	JOINT
EFG2	FORMATTER	NO17	EJF6	JOINT
EFK1	FORMATTER	NO18	ECONT	TACT SW
EFL1	FORMATTER	NO19	PSC2	LED/RECEIVER
EFA1	FORMATTER	NO20	EAF1	AUDIO
EAS1	AUDIO	NO21	PAS3	SP TERMINAL L
EAS2	AUDIO	NO22	PAS4	SP TERMINAL R
EJA1	JOINT	NO24	EAJ1	AUDIO
EAS3	AUDIO	NO28	EAS4	SUB WOOFER
AC INLET	AC INLET	E902	PPU25	FILTER
AC INLET	AC INLET	E903	Chassis GND	Chassis GND
PSW5	FILTER	ESW	ESW	SW

Wiring diagram 2/2


POWER UNIT
PANEL Y-SUS
PANEL LOGIC
PANEL X-SUS
AUDIO PWB
FORMATTER UNIT
SUB WOOFER PWB
TACT SW PWB
FILTER PWB
SP TERMINAL R PWB
SP TERMINAL L PWB
SW PWB
LED/RECEIVER PWB
AC INLET
NVS7
(*4)
NVS3
(*4)
NVS2
(*4)
CNPPS
CN63
CN3
CN61
No.2
No.6
No.5
No.4
No.7
No.12
No.13
No.14
No.15
No.16
No.17
No.18
No.19
No.20
No.21
No.22
No.24
No.28
NP03
Purse Lock 11.5
NP02
Purse Lock
11.5
(*3)
(From
PANEL MODULE)
#00W7
#00W6
EAS1
EAS2
EAS3
EAS4
EAJ1
EAF1
NVS5
(*8)
NVS10
NVS11
NP04
Purse Lock 5
EJP2
EJP1
EJA1
EJF1
EJF2
EJF5
EJF6
EJF4
EJF3
NVS4
#00W4
#00W5
EFJ2
EFJ1
EFJ4
EFA1
EFL1
EFK1
EFG1
EFG2
EFM1
(*7)
EFJ3
NVS1
NP01
Purse Lock 15
NVS6
NVS9
PAS3
ECONT
(*5)
E902
NP06
Purse Lock 11.5
11.5
Screw
PSW5
PPU25
PPU15
ESW
PAS4
PSC2
(*6)
E903
NP05
Purse Lock 15

Wind the wire by 1 turn.

Wind the wire by 1 turn.

Wind the wire by 1 turn.

#00W7 SK binder
Fix the ferrite core
by the hole of frame
metal after clamping.

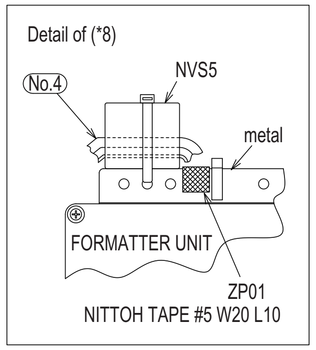
#00W6 SK binder
Fix the wire by the
hole of frame metal.

#00W4/#00W5 SK binder
Tie the wire to fix the
ferrite core.

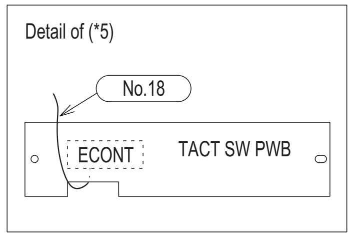
Close the SP terminal
(both L and R).

Pay attention not to pinch the wire by rear cover.

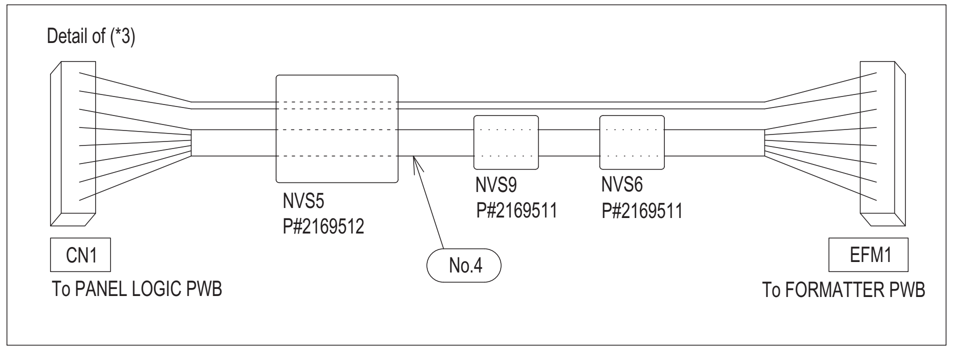
Detail of (*8)


No.4
NVS5
metal
FORMATTER UNIT
ZP01
NITTOH TAPE #5 W20 L10

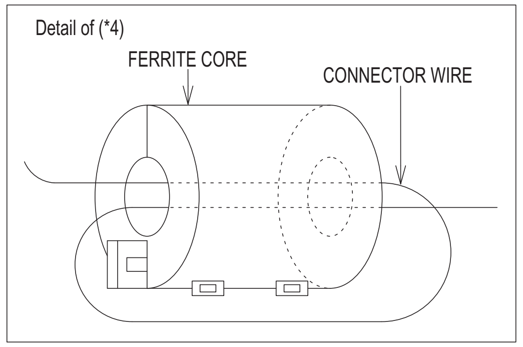
Detail of (*5)


No.18
ECONT
TACT SW PWB

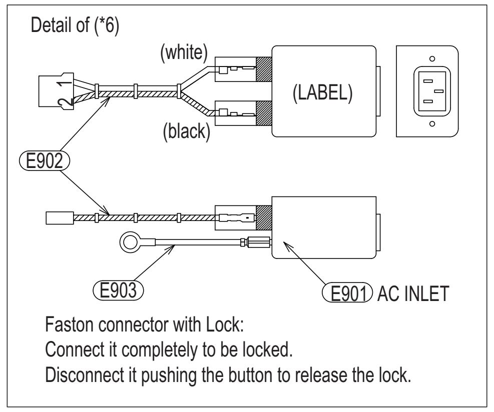
Detail of (*3)


NVS5
P#2169512
NVS9
P#2169511
NVS6
P#2169511
No.4
CN1
To PANEL LOGIC PWB
EFM1
To FORMATTER PWB

Detail of (*4)

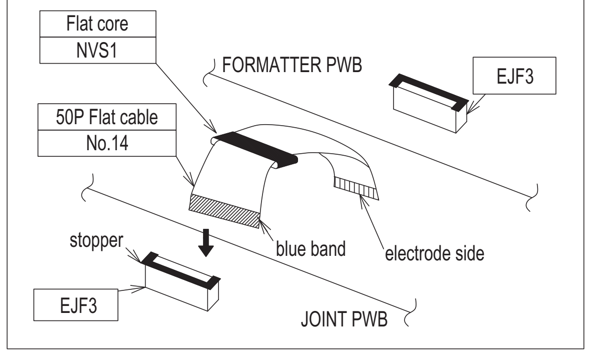

FERRITE CORE
CONNECTOR WIRE

Detail of (*6)


(white)
(black)
(LABEL)
E902
E903
E901
AC INLET

Faston connector with Lock:
Connect it completely to be locked.
Disconnect it pushing the button to release the lock.

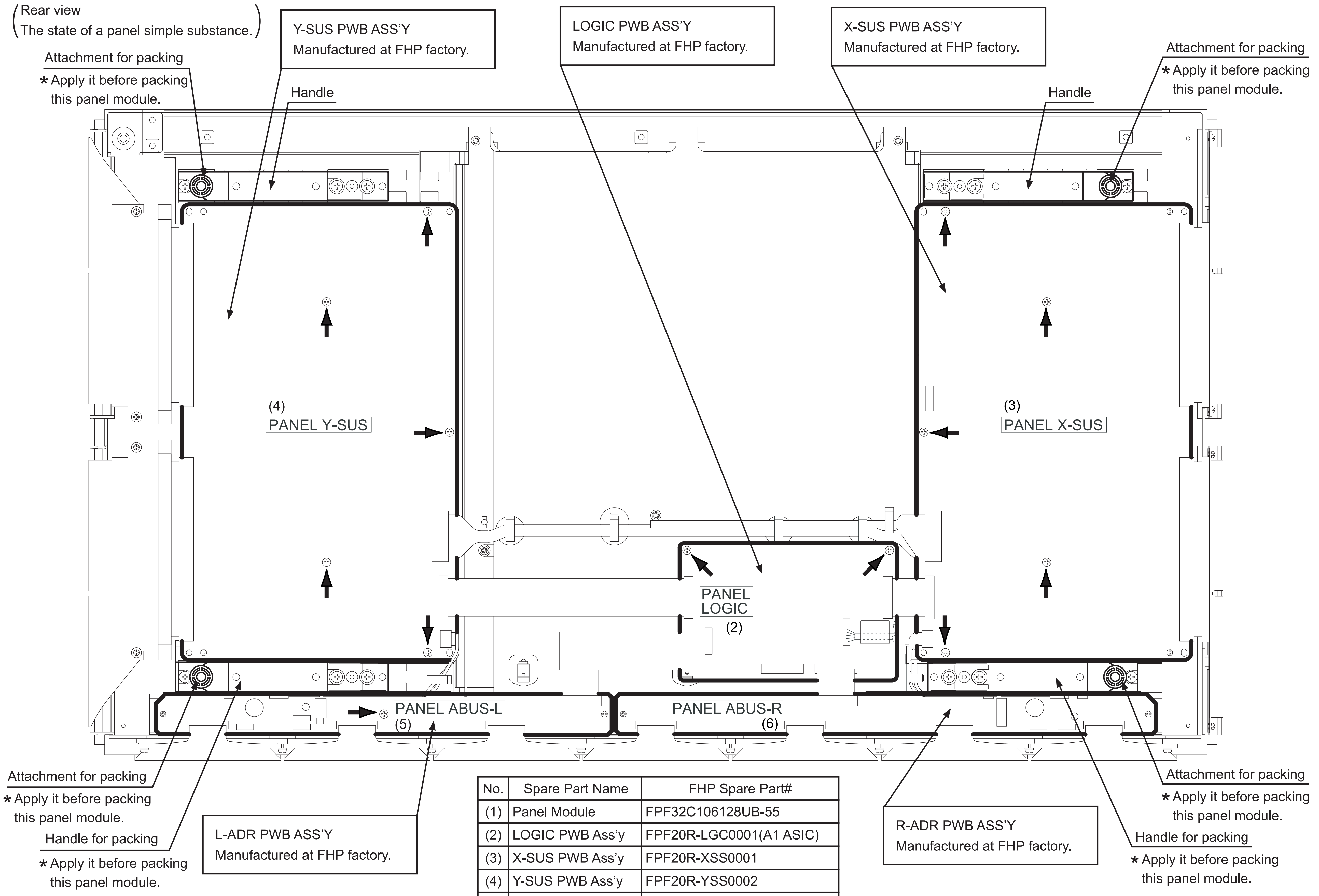
Detail of (*9)
Pass No.14 connector through NVS1.
Insert it in EJF3/EFJ3 and push the stopper down to lock.


Flat core
NVS1
50P Flat cable
No.14
FORMATTER PWB
EJF3
stopper
blue band
electrode side
EJF3
JOINT PWB

14. Disassembly diagram

[32PD5000]

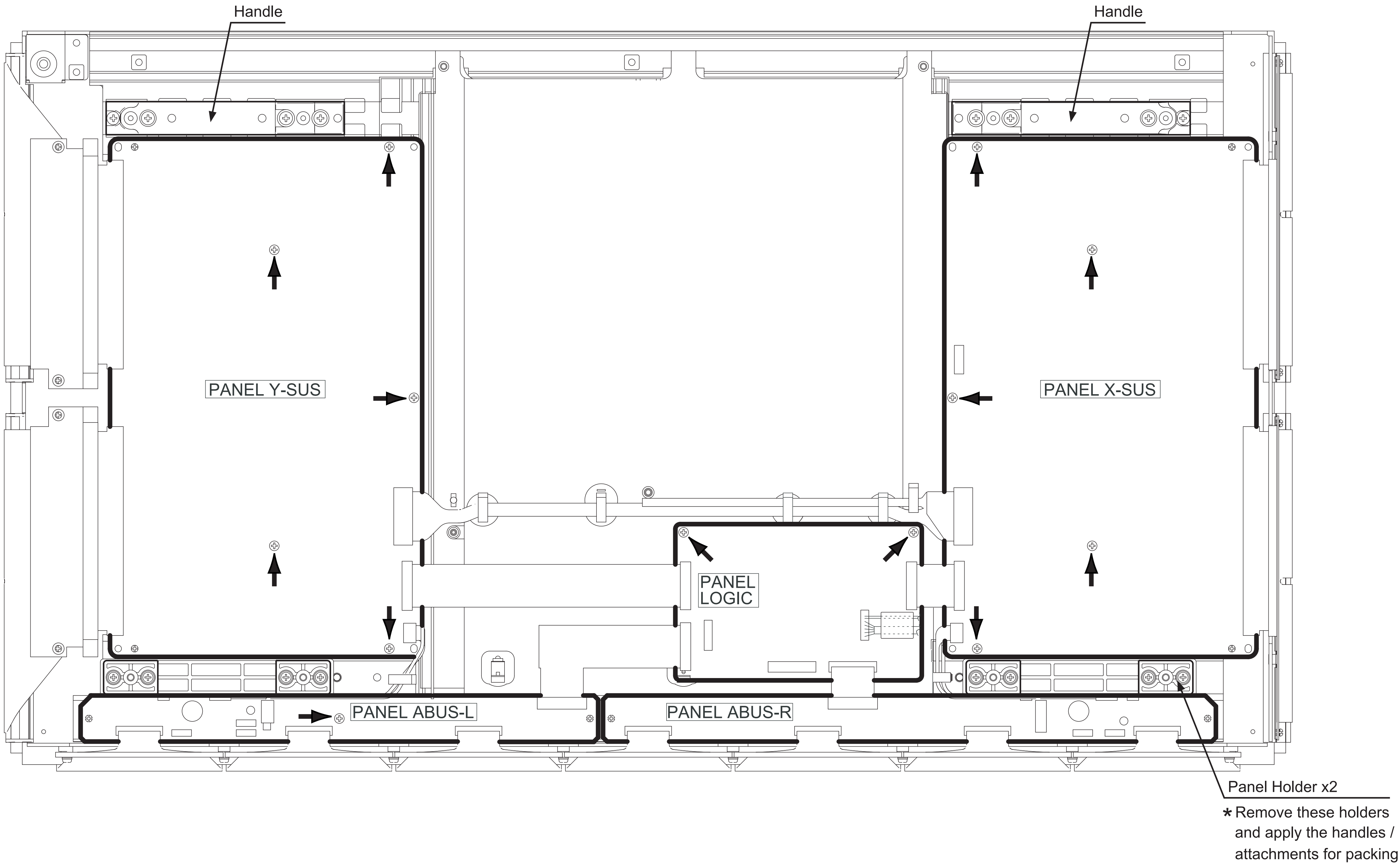
The figure of FHP Panel Module (32V)


Rear view
The state of a panel simple substance.
Y-SUS PWB ASS'Y
Manufactured at FHP factory.
LOGIC PWB ASS'Y
Manufactured at FHP factory.
X-SUS PWB ASS'Y
Manufactured at FHP factory.
Attachment for packing
* Apply it before packing this panel module.
Handle
Handle
Attachment for packing
* Apply it before packing this panel module.
(4)
PANEL Y-SUS
(3)
PANEL X-SUS
PANEL LOGIC
(2)
PANEL ABUS-L
(5)
PANEL ABUS-R
(6)
Attachment for packing
* Apply it before packing this panel module.
Handle for packing
* Apply it before packing this panel module.
L-ADR PWB ASS'Y
Manufactured at FHP factory.
R-ADR PWB ASS'Y
Manufactured at FHP factory.
Attachment for packing
* Apply it before packing this panel module.
Handle for packing
* Apply it before packing this panel module.

No.	Spare Part Name	FHP Spare Part#
(1)	Panel Module	FPF32C106128UB-55
(2)	LOGIC PWB Ass'y	FPF20R-LGC0001(A1 ASIC)
(3)	X-SUS PWB Ass'y	FPF20R-XSS0001
(4)	Y-SUS PWB Ass'y	FPF20R-YSS0002
(5)	A-BUS L PWB Ass'y	FPF20R-ABL0003
(6)	A-BUS R PWB Ass'y	FPF20R-ABR0004

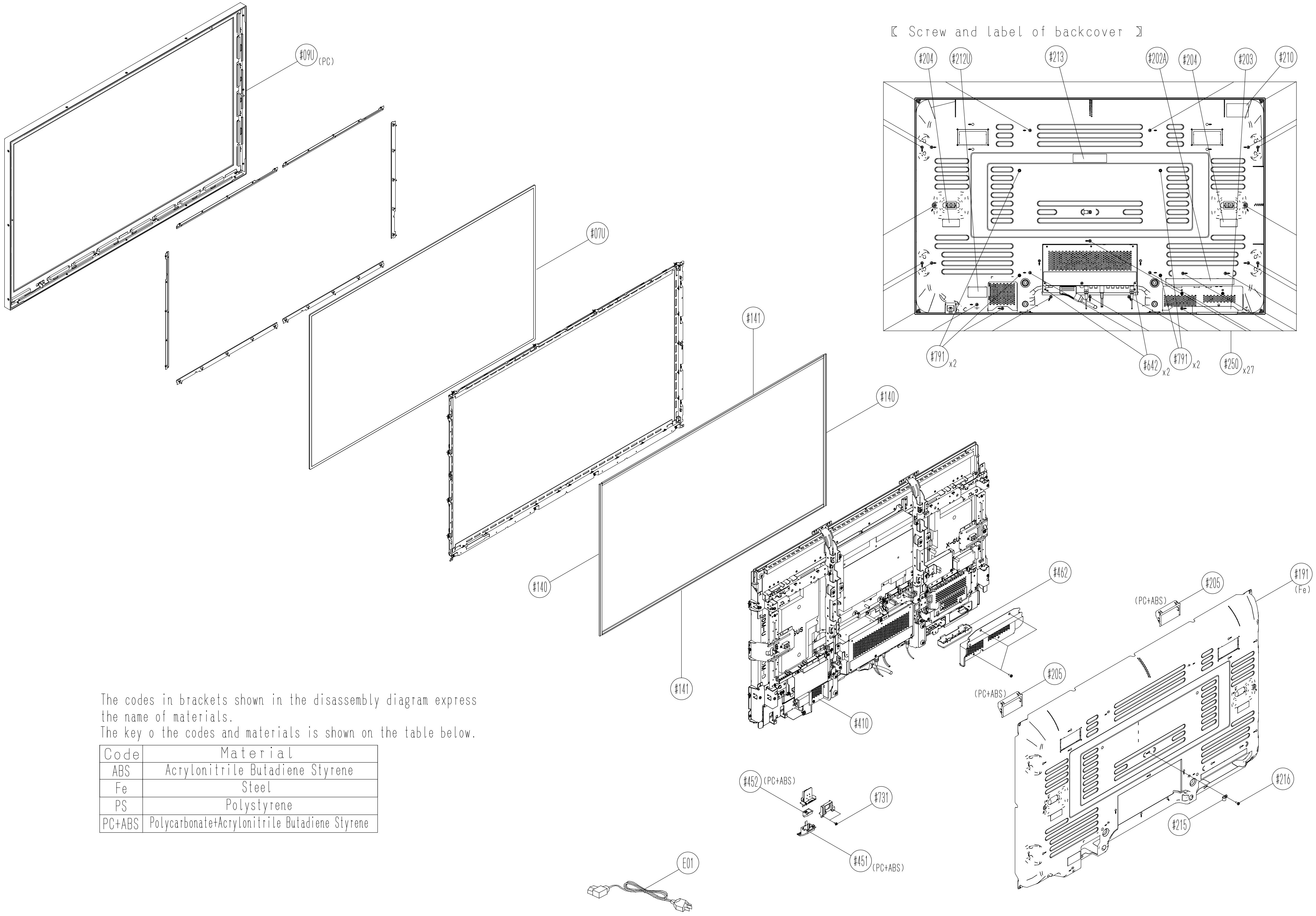
Panel Module (32V)

[The assembled form in a product (before servcing)]


Handle
Handle
PANEL Y-SUS
PANEL X-SUS
PANEL LOGIC
PANEL ABUS-L
PANEL ABUS-R
Panel Holder x2

* Remove these holders and apply the handles / attachments for packing.

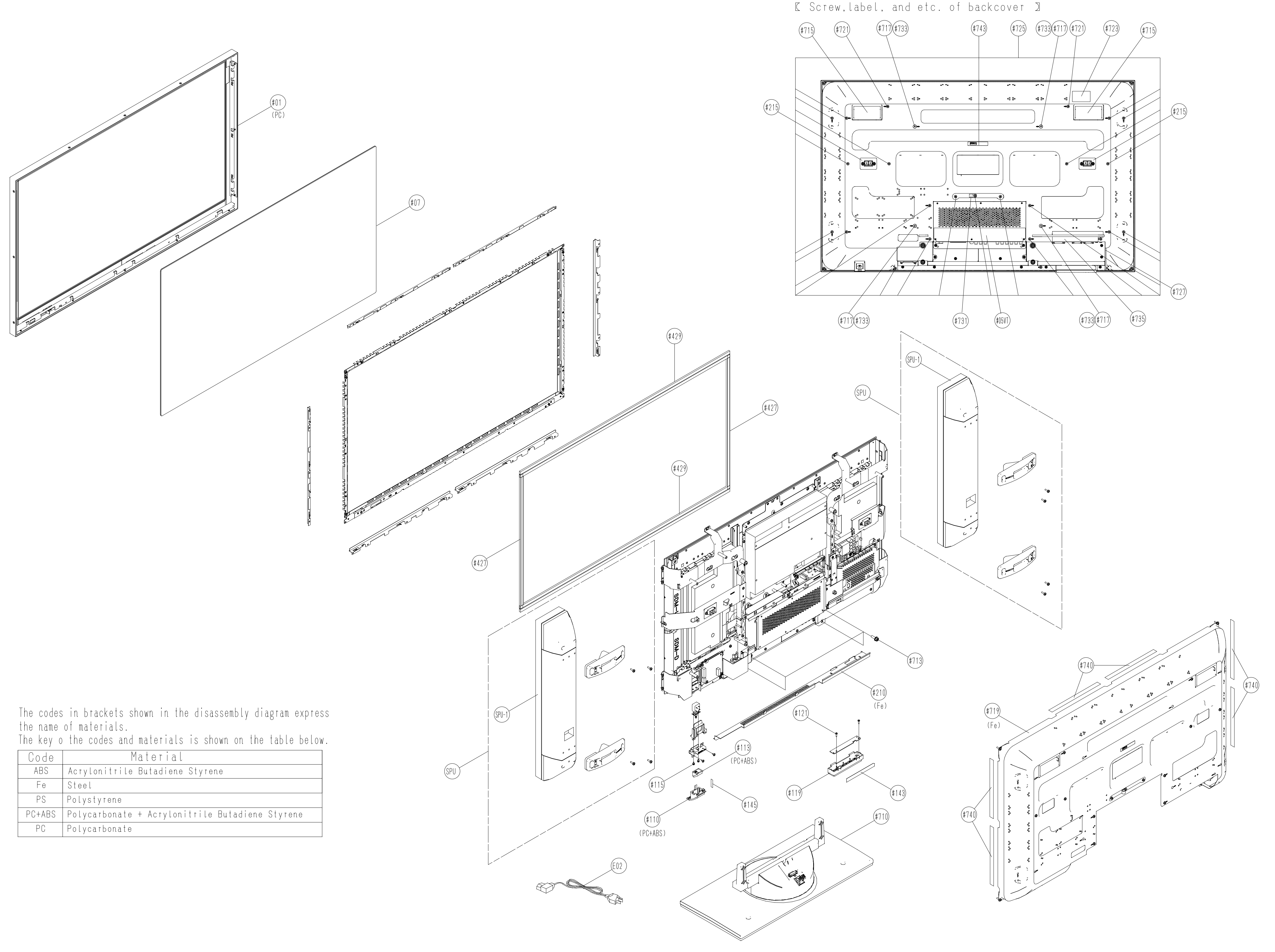
[42PD5000]


《 Screw and label of backcover 》
#204
#212U
#213
#202A
#204
#203
#210
#791 x2
#642 x2
#791 x2
#250 x27
#09U (PC)
#07U
#141
#140
#140
#141
#462
#205 (PC+ABS)
#191 (Fe)
#205 (PC+ABS)
#410
#452 (PC+ABS)
#731
#451 (PC+ABS)
#216
#215
E01

The codes in brackets shown in the disassembly diagram express the name of materials.
The key o the codes and materials is shown on the table below.

Code	Material
ABS	Acrylonitrile Butadiene Styrene
Fe	Steel
PS	Polystyrene
PC+ABS	Polycarbonate+Acrylonitrile Butadiene Styrene

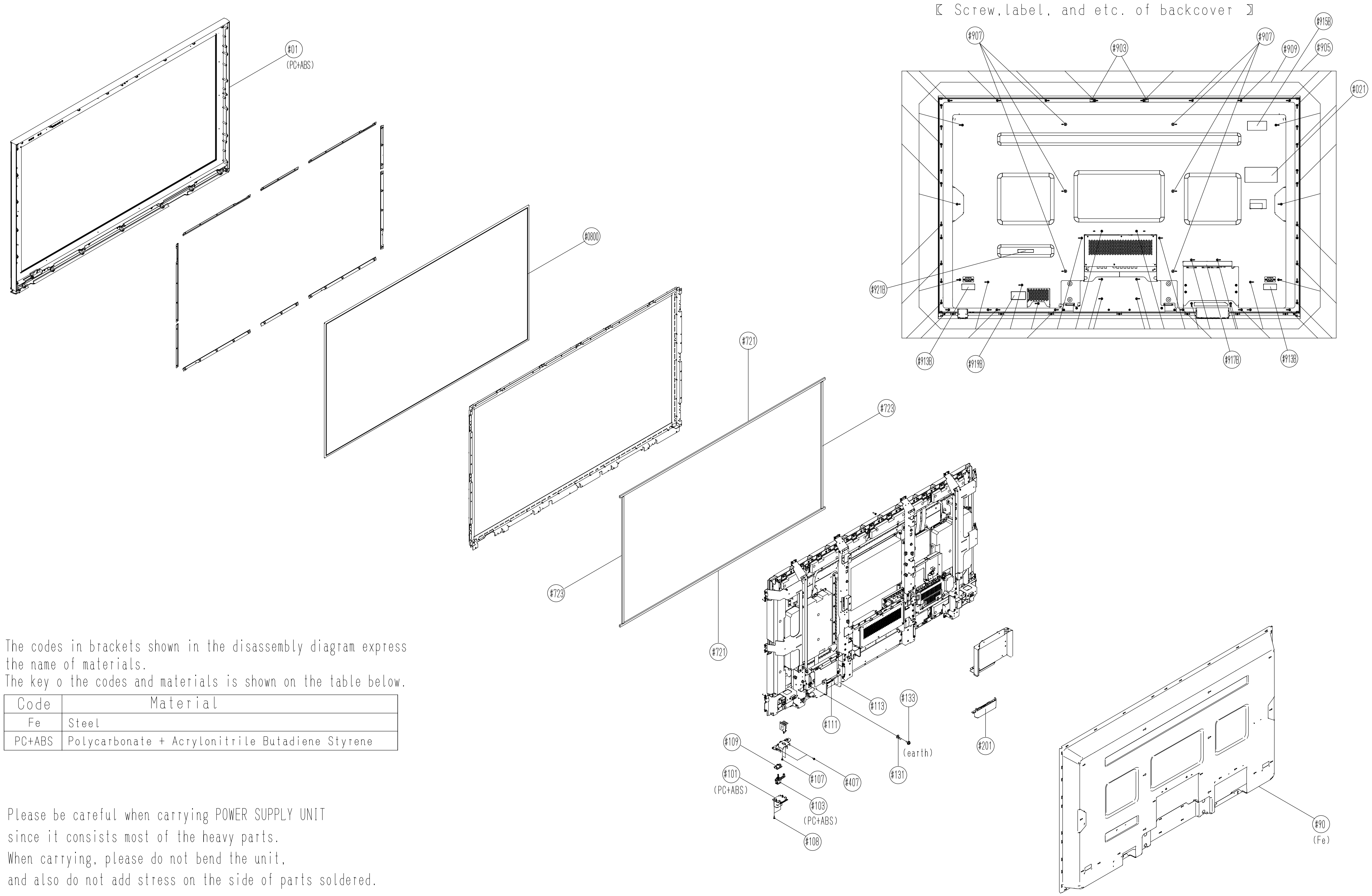
37PD5000


〖 Screw,label, and etc. of backcover 〗
#715
#721
#717
#733
#743
#725
#723
#215
#727
#731
#05VT
#735
#01
(PC)
#07
#429
#427
SPU-1
SPU
SDM-D
#713
#210
(Fe)
#121
#113
(PC+ABS)
#115
#119
#143
#145
#110
(PC+ABS)
#710
E02
#740
#719
(Fe)

The codes in brackets shown in the disassembly diagram express the name of materials.
The key o the codes and materials is shown on the table below.

Code	Material
ABS	Acrylonitrile Butadiene Styrene
Fe	Steel
PS	Polystyrene
PC+ABS	Polycarbonate + Acrylonitrile Butadiene Styrene
PC	Polycarbonate

14. Disassembly diagram


〖 Screw,label, and etc. of backcover 〗
#907
#903
#907
#915B
#909
#905
#021
#921B
#913B
#919B
#917B
#913B
#01
(PC+ABS)
#0800
#721
#723
#723
#721
#113
#111
#133
(earth)
#131
#201
#109
#107
#407
#101
(PC+ABS)
#103
(PC+ABS)
#108
#90
(Fe)

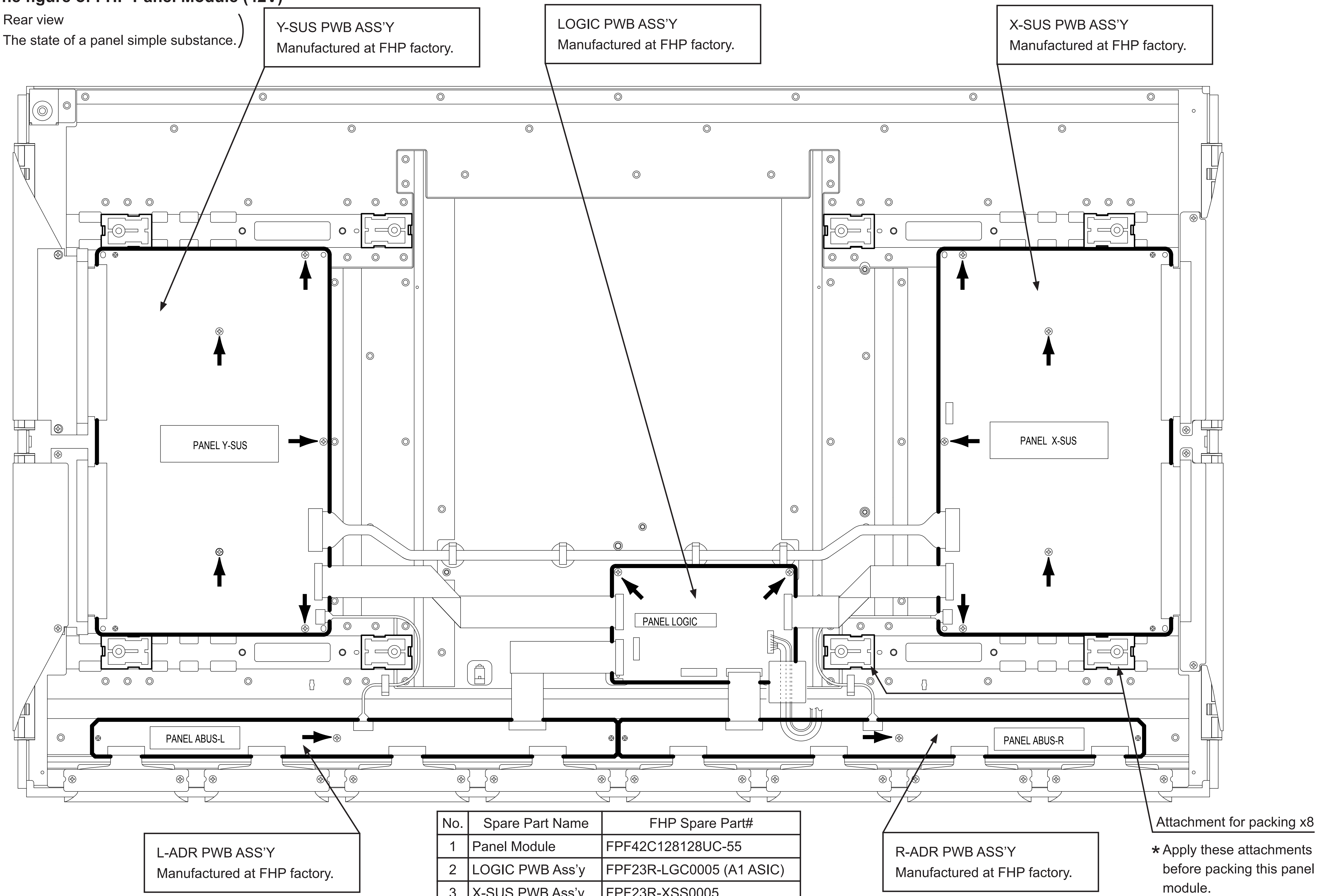
The codes in brackets shown in the disassembly diagram express the name of materials.
The key o the codes and materials is shown on the table below.

Code	Material
Fe	Steel
PC+ABS	Polycarbonate + Acrylonitrile Butadiene Styrene

Please be careful when carrying POWER SUPPLY UNIT
since it consists most of the heavy parts.
When carrying, please do not bend the unit,
and also do not add stress on the side of parts soldered.

The figure of FHP Panel Module (42V)

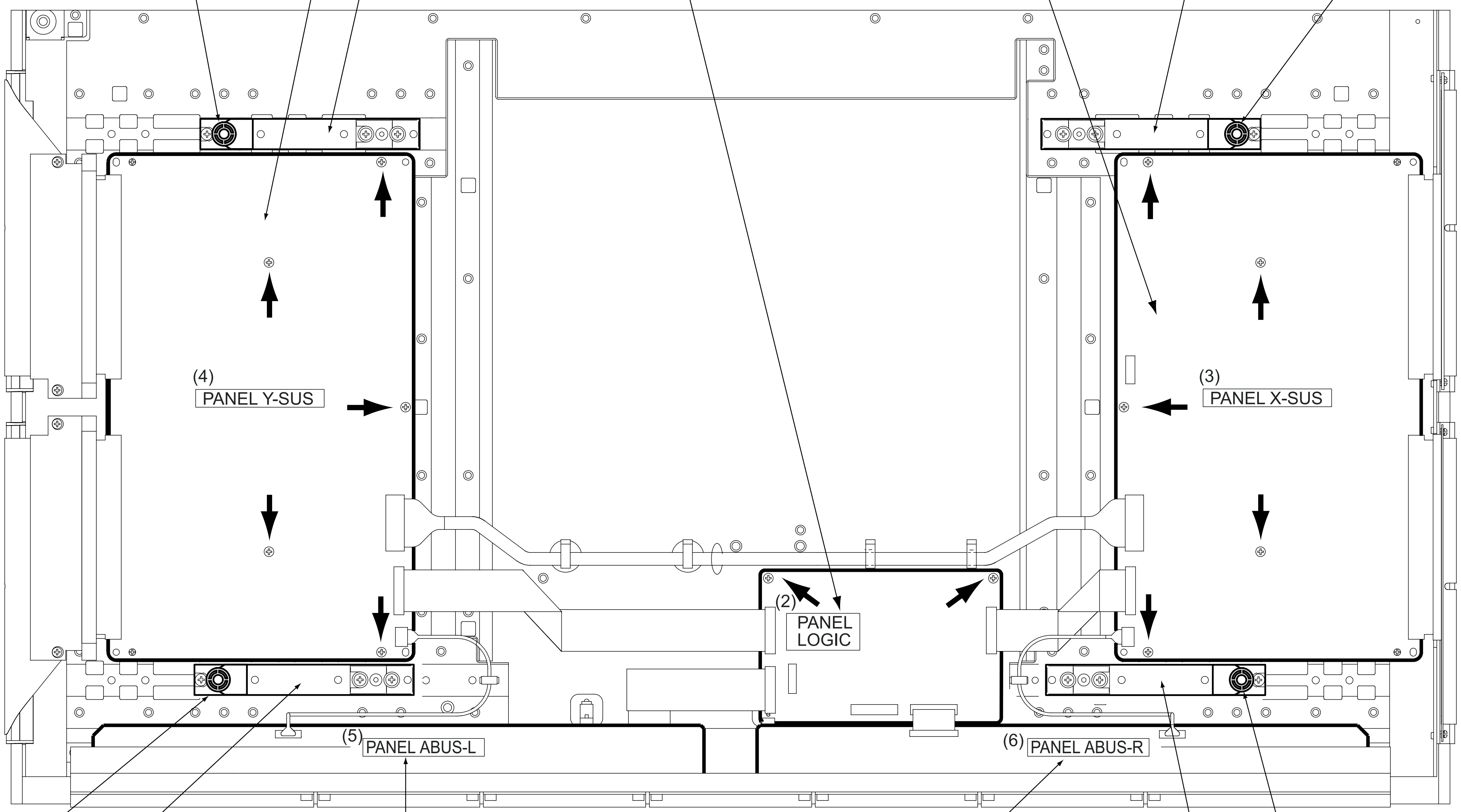
(Rear view
The state of a panel simple substance.)


Y-SUS PWB ASS'Y
Manufactured at FHP factory.
LOGIC PWB ASS'Y
Manufactured at FHP factory.
X-SUS PWB ASS'Y
Manufactured at FHP factory.
PANEL Y-SUS
PANEL X-SUS
PANEL LOGIC
PANEL ABUS-L
PANEL ABUS-R
L-ADR PWB ASS'Y
Manufactured at FHP factory.
R-ADR PWB ASS'Y
Manufactured at FHP factory.
Attachment for packing x8

*Apply these attachments before packing this panel module.

No.	Spare Part Name	FHP Spare Part#
1	Panel Module	FPF42C128128UC-55
2	LOGIC PWB Ass'y	FPF23R-LGC0005 (A1 ASIC)
3	X-SUS PWB Ass'y	FPF23R-XSS0005
4	Y-SUS PWB Ass'y	FPF23R-YSS0006
5	A-BUS L PWB Ass'y	FPF23R-ABL0001
6	A-BUS R PWB Ass'y	FPF23R-ABR0002

The figure of FHP Panel Module (37V)
(Rear view
The state of a panel simple substance.)



Y-SUS PWB ASS'Y
Manufactured at FHP factory.

LOGIC PWB ASS'Y
Manufactured at FHP factory.

X-SUS PWB ASS'Y
Manufactured at FHP factory.

Attachment for packing
* Apply it before packing
this panel module.

Attachment for packing
* Apply it before packing
this panel module.

Attachment for packing
* Apply it before packing
this panel module.

Handle for packing
* Apply it before packing
this panel module.

L-ADR PWB ASS'Y
Manufactured at FHP factory.

No.	Spare Part Name	FHP Spare Part#
(1)	Panel Module	FPF37C128128UB-75
(2)	LOGIC PWB Ass'y	FPF22R-LGC0003(A1 ASIC)
(3)	X-SUS PWB Ass'y	FPF22R-XSS0003
(4)	Y-SUS PWB Ass'y	FPF22R-YSS0004
(5)	A-BUS L PWB Ass'y	FPF22R-ABL0005
(6)	A-BUS R PWB Ass'y	FPF22R-ABR0006

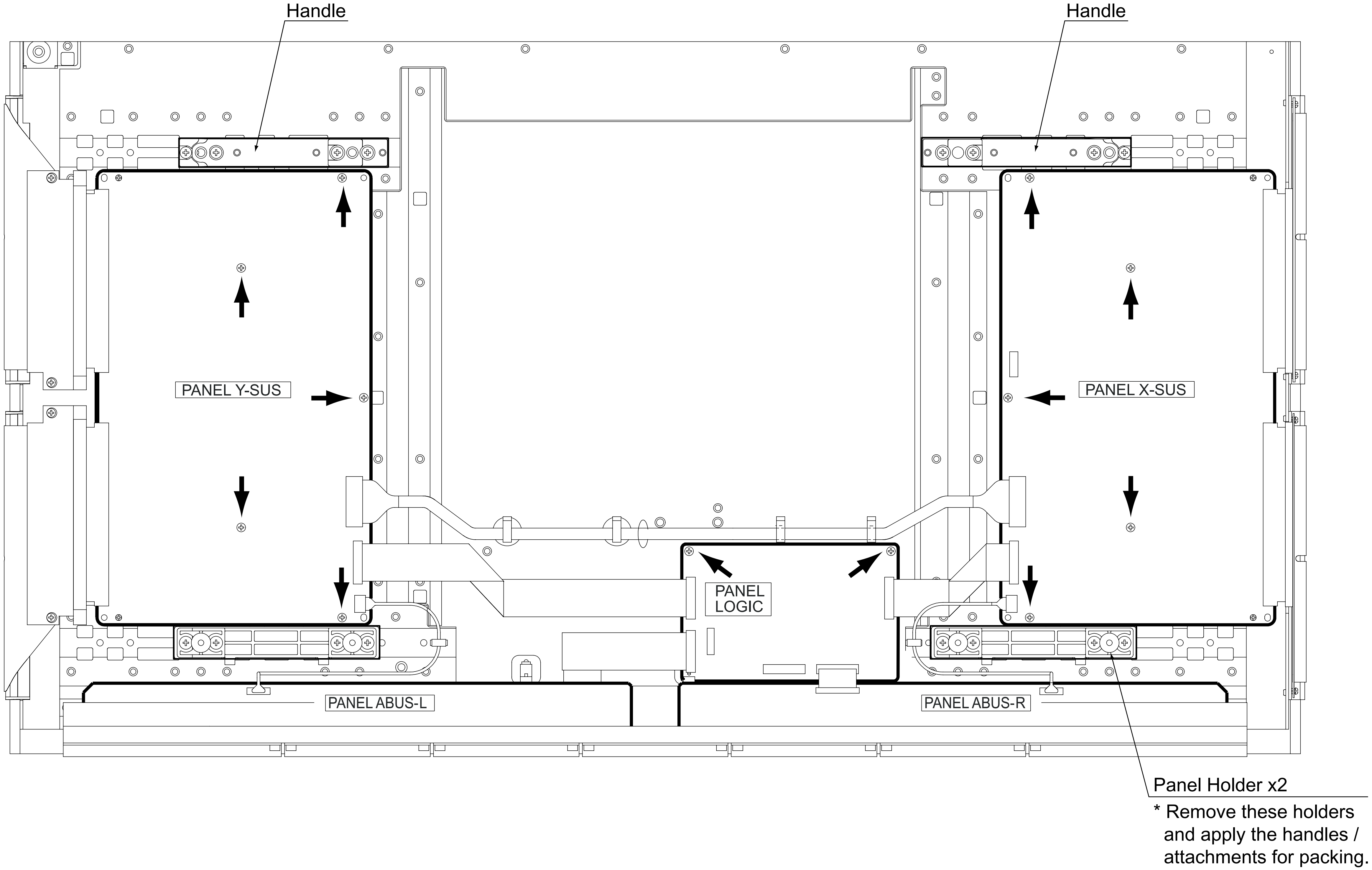
R-ADR PWB ASS'Y
Manufactured at FHP factory.

Attachment for packing
* Apply it before packing
this panel module.

Handle for packing
* Apply it before packing
this panel module.

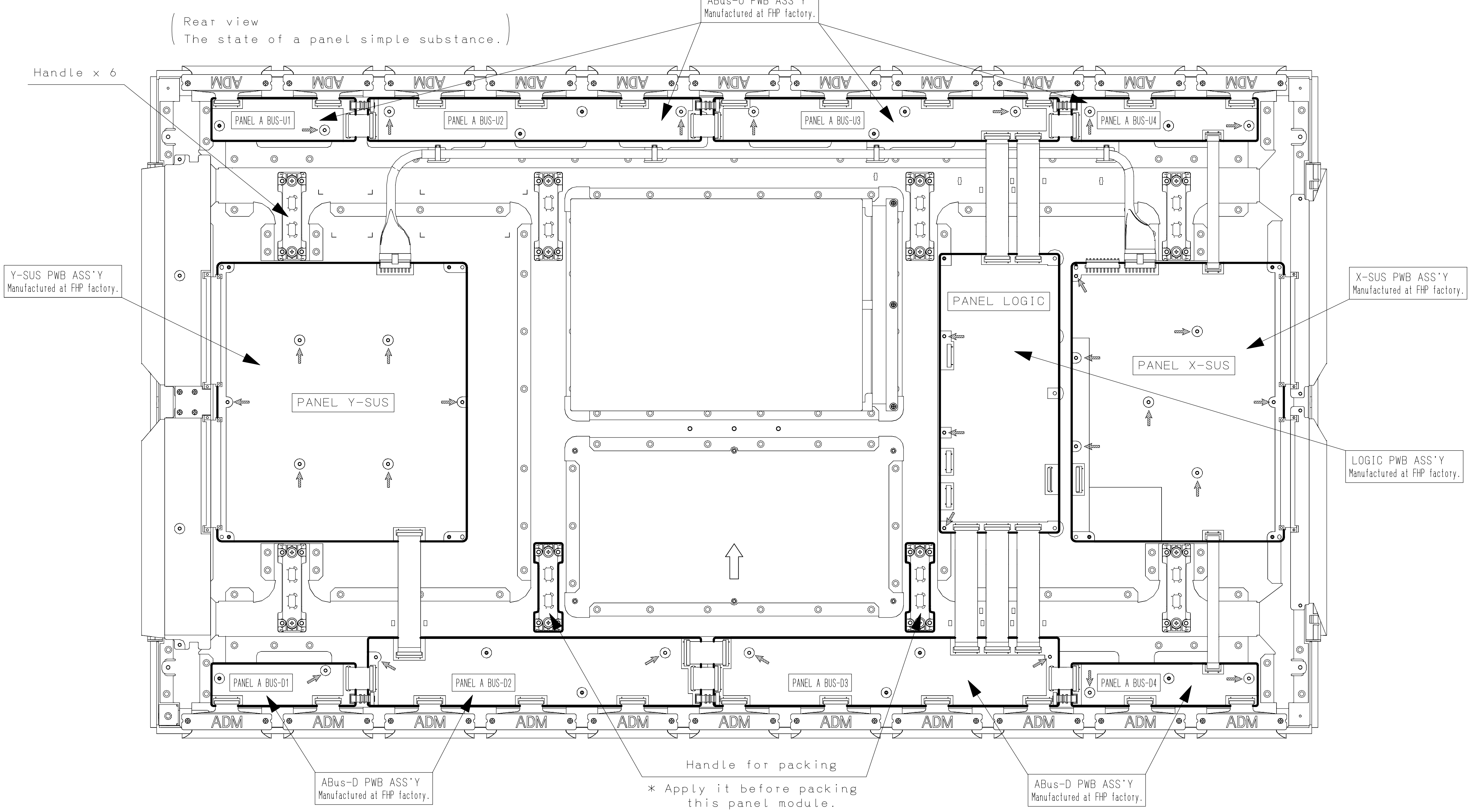
Panel Module (37V)

[The assembled form in a product (before servicing)]


Handle
Handle
PANEL Y-SUS
PANEL X-SUS
PANEL LOGIC
PANEL ABUS-L
PANEL ABUS-R
Panel Holder x2

* Remove these holders and apply the handles / attachments for packing.

The figure of FHP Panel Module


(Rear view
The state of a panel simple substance.)

Handle x 6

ABus-U PWB ASS'Y
Manufactured at FHP factory.

Y-SUS PWB ASS'Y
Manufactured at FHP factory.

X-SUS PWB ASS'Y
Manufactured at FHP factory.

LOGIC PWB ASS'Y
Manufactured at FHP factory.

ABus-D PWB ASS'Y
Manufactured at FHP factory.

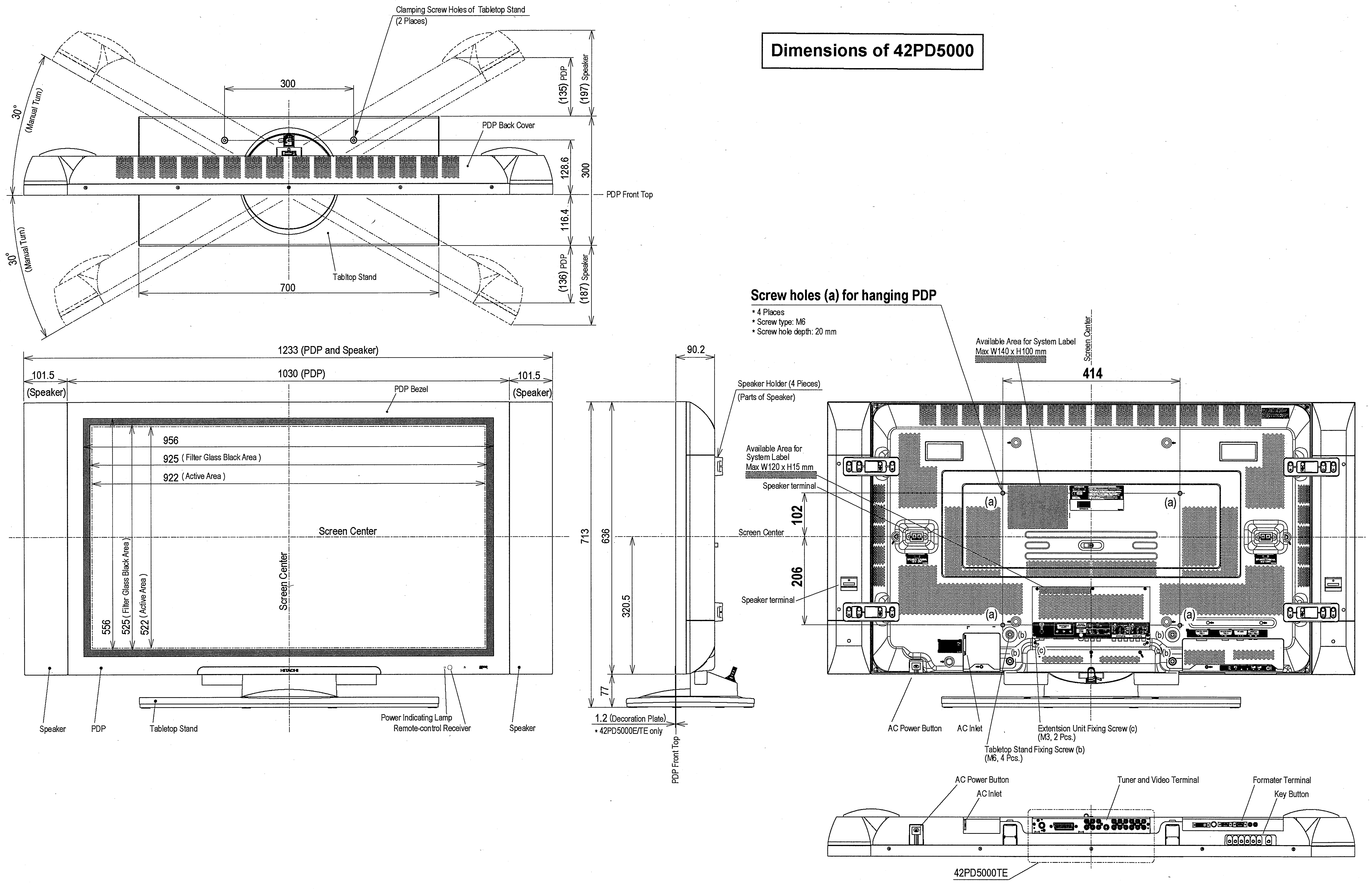
Handle for packing
* Apply it before packing
this panel module.

ABus-D PWB ASS'Y
Manufactured at FHP factory.

ADM
PANEL A BUS-U1
PANEL A BUS-U2
PANEL A BUS-U3
PANEL A BUS-U4
PANEL Y-SUS
PANEL LOGIC
PANEL X-SUS
PANEL A BUS-D1
PANEL A BUS-D2
PANEL A BUS-D3
PANEL A BUS-D4

No.	Spare Part Name	FHP Spare Part#
1	Panel Module	FPF42C128128UC-55
2	LOGIC PWB	FPF23R-LGC0005 (A1 ASIC)
3	X-SUS PWB	FPF23R-XSS0005
4	Y-SUS PWB	FPF23R-YSS0006
5	A-BUS L PWB	FPF23R-ABL0001
6	A-BUS R PWB	FPF23R-ABR0002

Dimensions of 42PD5000



Screw holes (a) for hanging PDP

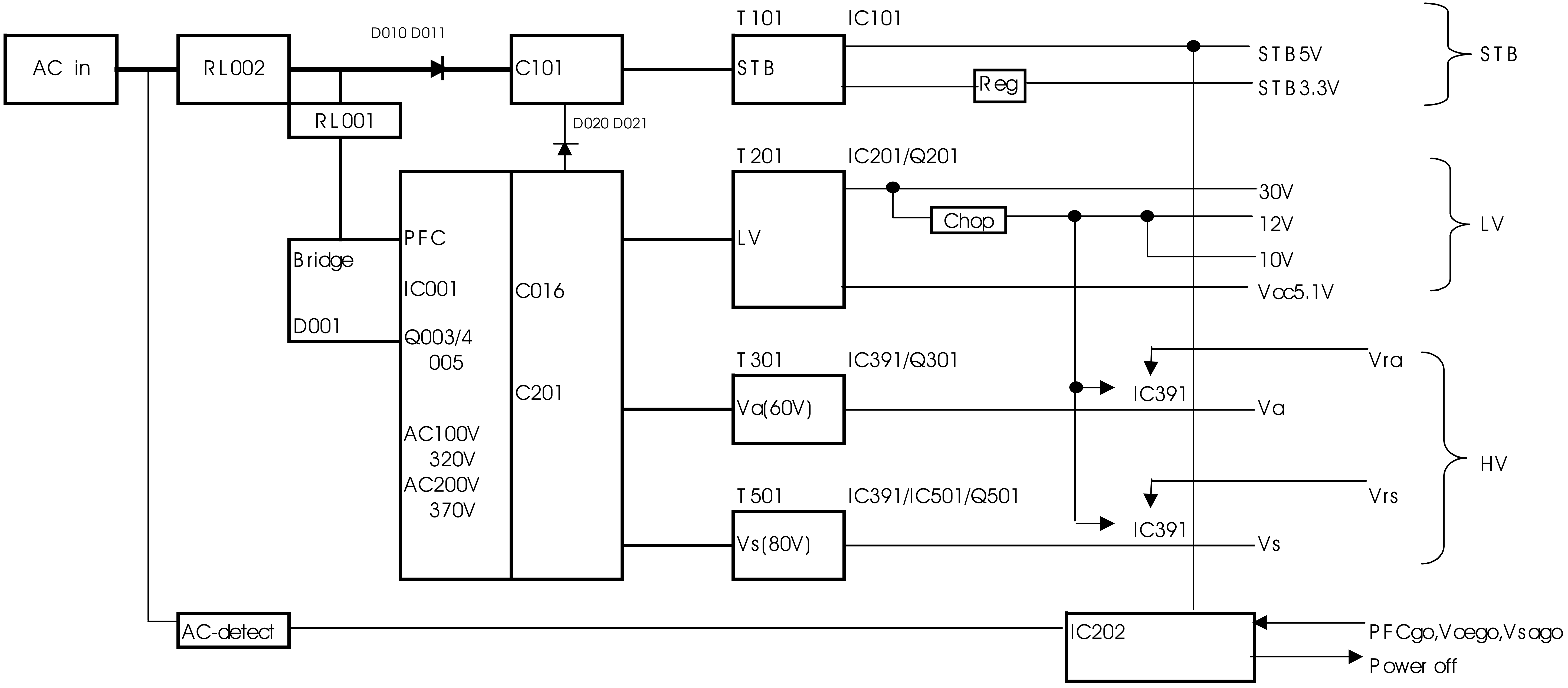
- * 4 Places
- * Screw type: M6
- * Screw hole depth: 20 mm

Clamping Screw Holes of Tabletop Stand
(2 Places)
300
30°
(Manual Turn)
PDP Back Cover
(135) PDP
(197) Speaker
128.6
300
116.4
PDP Front Top
(136) PDP
(187) Speaker
Tabltop Stand
700
30°
(Manual Turn)
1233 (PDP and Speaker)
101.5
(Speaker)
1030 (PDP)
101.5
(Speaker)
PDP Bezel
956
925 (Filter Glass Black Area)
922 (Active Area)
Screen Center
Screen Center
556
525 (Filter Glass Black Area)
522 (Active Area)
HITACHI
Speaker
PDP
Tabletop Stand
Power Indicating Lamp
Remote-control Receiver
Speaker
90.2
713
636
320.5
77
1.2 (Decoration Plate)
* 42PD5000E/TE only
PDP Front Top
Speaker Holder (4 Pieces)
(Parts of Speaker)
Available Area for System Label
Max W120 x H15 mm
Speaker terminal
Screen Center
Speaker terminal
102
206
Available Area for System Label
Max W140 x H100 mm
Screen Center
414
(a)
(a)
(a)
(a)
(b)
(b)
(b)
(b)
(c)
AC Power Button
AC Inlet
Extentsion Unit Fixing Screw (c)
(M3, 2 Pcs.)
Tabletop Stand Fixing Screw (b)
(M6, 4 Pcs.)
AC Power Button
AC Inlet
Tuner and Video Terminal
Formater Terminal
Key Button
42PD5000TE

THE UPDATED PARTS LIST

FOR THIS MODEL IS

AVAILABLE ON ESTA


AC in
RL002
RL001
D010 D011
C101
D020 D021
Bridge
D001
PFC
IC001
Q003/4
005
AC100V
320V
AC200V
370V
C016
C201
T101
IC101
STB
Reg
STB5V
STB3.3V
STB
T201
IC201/Q201
LV
Chop
30V
12V
10V
Vcc5.1V
LV
T301
IC391/Q301
Va(60V)
Vra
IC391
Va
T501
IC391/IC501/Q501
Vs(80V)
Vrs
IC391
Vs
HV
AC-detect
IC202
PFCgo,Vcego,Vsago
Power off

SM005

Power Supply Block Diagram

HITACHI

1.AC input

No	CN61
1	AC(L)
2	NC
3	AC(N)
4	NC
5	NC
6	FG

2.signal 1

No	CN63
1	STB5V
2	NC
3	STB3.3V
4	Power off
5	GND

3.Signal 2

No	CNPPS
1	30V
2	GND
3	GND
4	5V
5	5V
6	GND
7	GND
8	12V
9	12V
10	GND
11	GND
12	10V
13	10V

4.Panel 1

No	CN64
1	Va
2	NC
3	Vcc
4	GND
5	GND
6	GND
7	NC
8	Vs
9	Vs
10	Vs

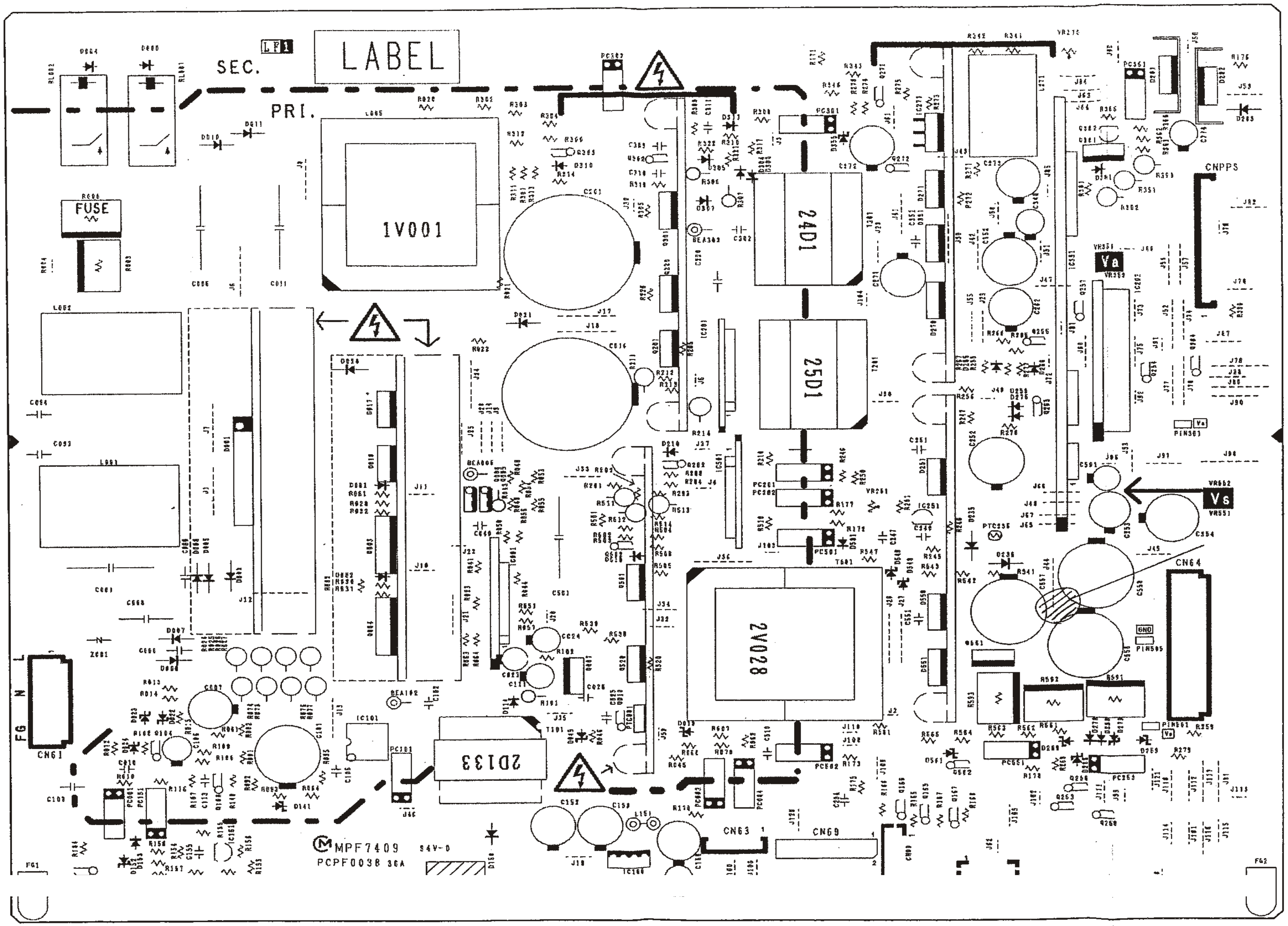
5.Panel 4

No	CN68
1	STB3.3V
2	NC
3	GND
4	GND
5	NC
6	Vcc

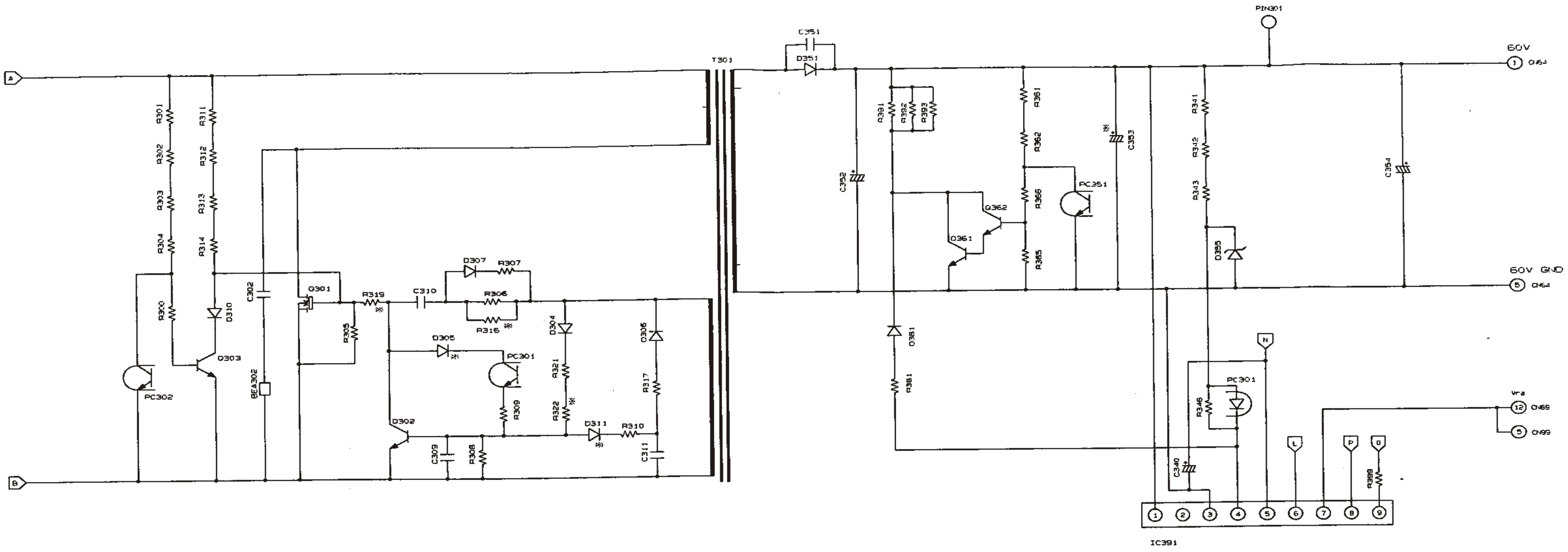
6.Panel 5

No	CN69
1	NC
2	NC
3	NC
4	NC
5	GND
6	Vsago
7	GND
8	Vcego
9	GND
10	PFCgo
11	GND
12	Vra
13	GND
14	Vrs
15	GND
16	NC
17	GND
18	NC
19	GND
20	NC

Panel Connectors

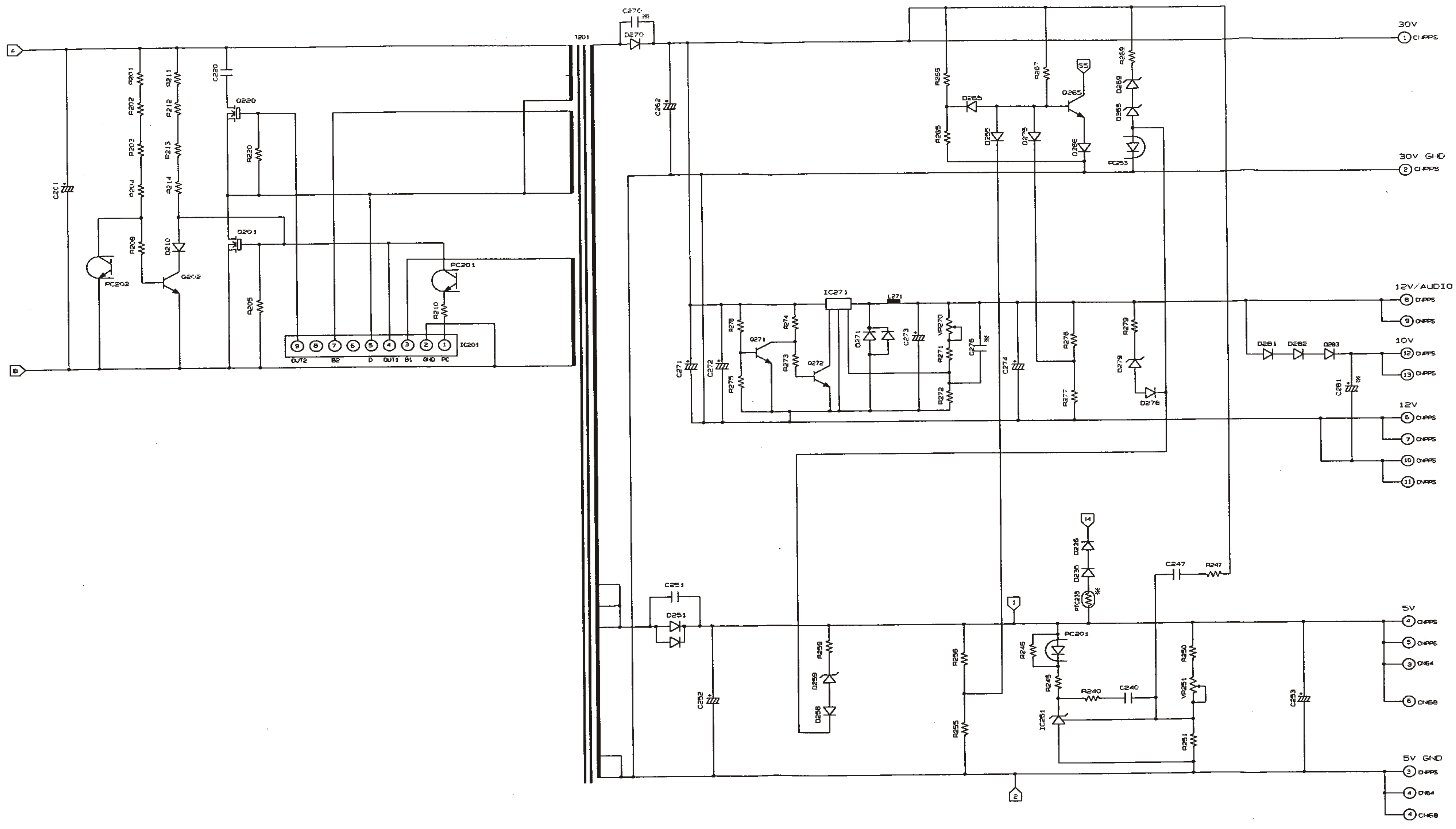

LABEL
LF1
SEC.
PRI.
FUSE
1V001
24D1
25D1
2V028
2D133
L
N
FG
CN61
CN63
CN64
CN69
CNPPS
Va
Vs
GND
PIN505
PIN303
PIN501
MPF7409
PCPF0038 30A
S4V-D
IC101
IC201
IC251
IC271
IC501
T101
T201
T301
T501
PC101
PC301
PC351
PC501
PC502
PC251
PC253
L001
L002
L005
L151
L271
D501
D021
D210
D236
FG1
FG2

Power Supply Circuit Board


A
B
R301
R302
R303
R304
R300
R311
R312
R313
R314
D310
Q303
PC302
C302
BEA302
Q301
R305
R319 ※
C310
D307
R307
R306
R316 ※
D305 ※
PC301
R309
Q302
C309
R308
D304
R321
R322 ※
D311 ※
R310
D306
R317
C311
T301
C351
D351
C352
R391
R392
R393
Q362
Q361
R351
R362
R366
R365
PC351
※ C353
D381
R381
PIN301
R341
R342
R343
D355
C354
60V
① CN64
60V GND
⑤ CN64
N
PC301
R346
C340
L
P
D
R399
Vra
⑫ CN69
⑤ CN99
①
②
③
④
⑤
⑥
⑦
⑧
⑨
IC391

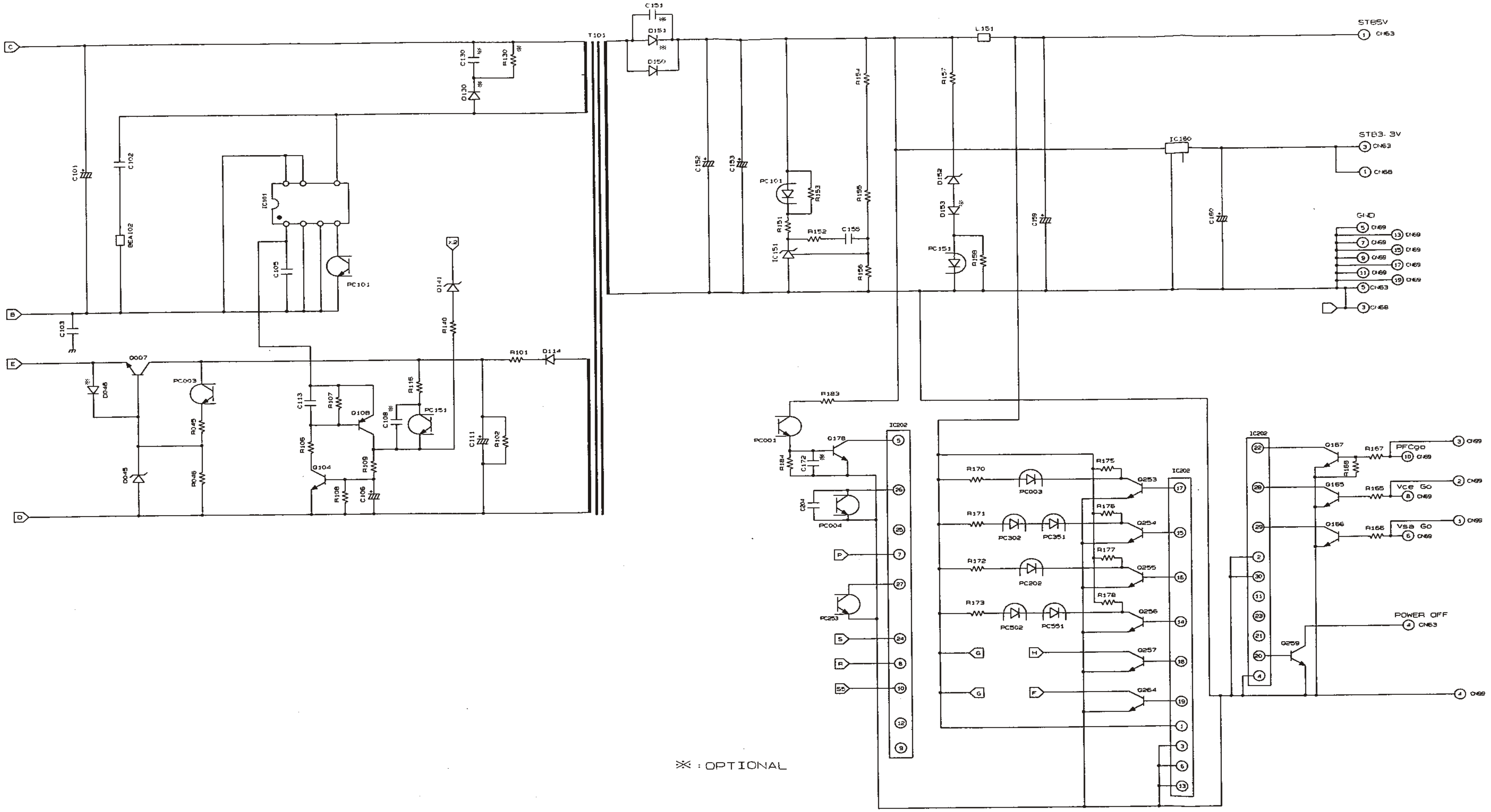
※ : OPTIONAL

Power Supply Circuit - 1 of 5


C270 ※
D270
T201
C262
R265
R266
D265
D255
D275
R267
S5
D265
D266
R269
D269
D268
PC253
30V
① CNPPS
30V GND
② CNPPS
C220
Q220
R201
R202
R203
R204
R211
R212
R213
R214
C201
R220
Q201
R208
D210
Q202
PC202
R205
PC201
R210
⑨ ⑧ ⑦ ⑥ ⑤ ④ ③ ② ①
IC201
OUT2
B2
D
OUT1
B1
GND
PC
IC271
L271
R278
Q271
R274
R273
Q272
R275
C271
C272
D271
C273
VR270
R271
R272
C275 ※
C274
R276
R277
R279
D279
D278
12V/AUDIO
⑧ CNPPS
⑨ CNPPS
D281
D282
D283
10V
⑫ CNPPS
⑬ CNPPS
C281 ※
12V
⑥ CNPPS
⑦ CNPPS
⑩ CNPPS
⑪ CNPPS
M
D236
D235
PTC235 ※
C247
R247
C251
D251
C252
R259
D259
D258
1
R256
R255
PC201
R246
R245
R240
C240
IC251
R250
VR251
R251
C253
5V
④ CNPPS
⑤ CNPPS
③ CN64
⑥ CN68
5V GND
③ CNPPS
④ CN64
④ CN68
2

※ : OPTIONAL

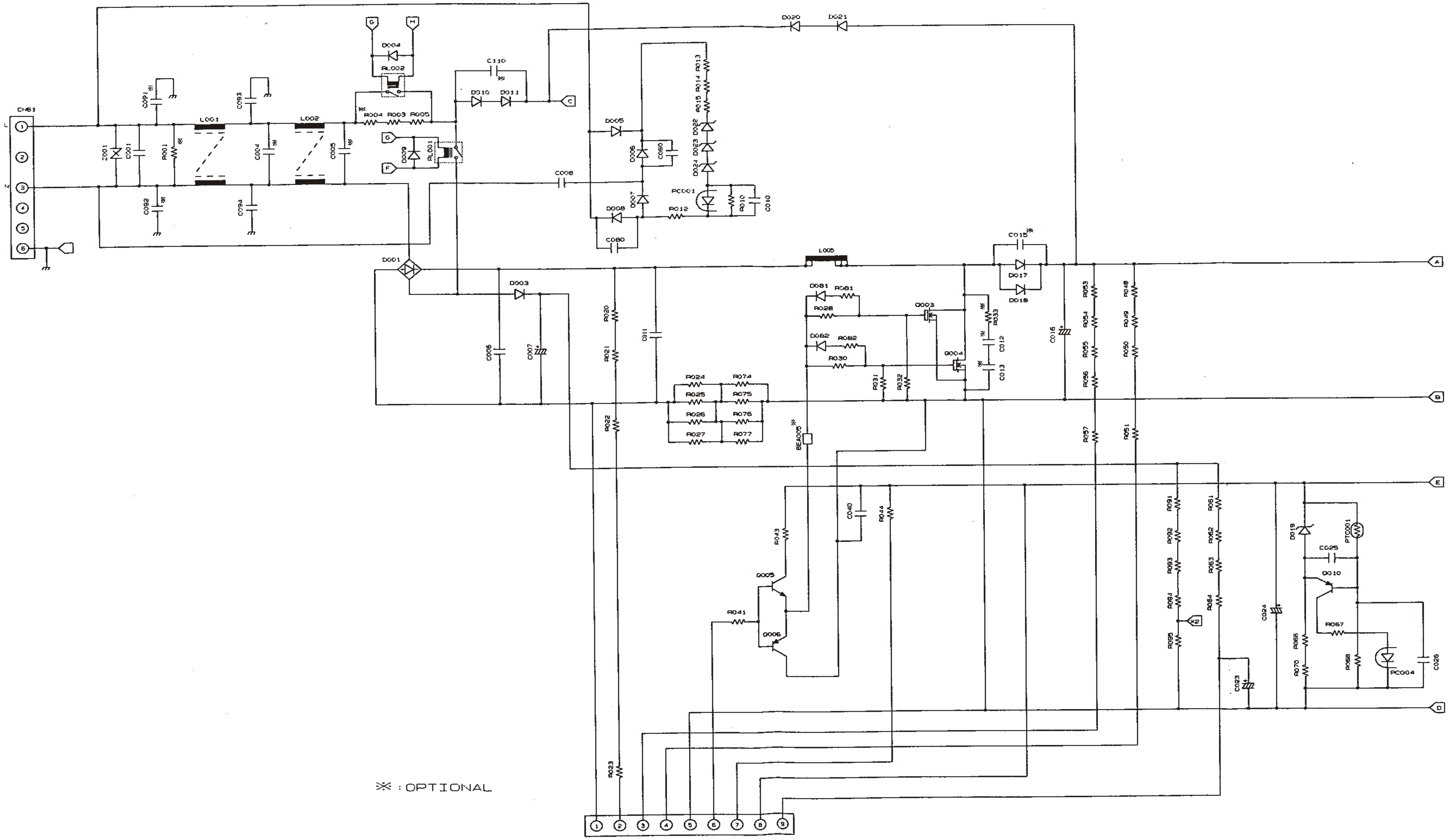
Power Supply Circuit - 2 of 5


C
B
E
D
X2
C101
C102
C103
BEA102
IC101
C105
PC101
C130 ※
R130 ※
D130 ※
T101
D141
R140
R101
D114
Q007
D046 ※
PC003
R045
R046
D045
C113
R107
Q108
R115
C108 ※
PC151
R105
Q104
R109
R108
C106
C111
R102
C151 ※
D151 ※
D150
C152
C153
PC101
R153
R151
R152
C155
IC151
R154
R155
R156
R157
D152
D153 ※
PC151
R158
L151
C159
IC160
C160
STB5V
1 CN63
STB3. 3V
3 CN63
1 CN68
GND
5 CN69
13 CN69
7 CN69
15 CN69
9 CN69
17 CN69
11 CN69
19 CN69
5 CN63
3 CN68
R183
PC001
Q178
R184
C172 ※
C204
PC004
PC253
P
S
R
S5
IC202
5
26
25
7
27
24
8
10
12
9
R170
PC003
R171
PC302
PC351
R172
PC202
R173
PC502
PC551
G
G
H
F
R175
R176
R177
R178
Q253
Q254
Q255
Q256
Q257
Q264
IC202
17
15
16
14
18
19
1
3
6
13
IC202
22
28
29
2
30
11
23
21
20
4
Q167
Q165
Q166
R167
R168
R165
R166
PFCgo
Vce Go
Vsa Go
3 CN99
10 CN69
2 CN99
8 CN69
1 CN99
6 CN69
POWER OFF
4 CN63
Q259
4 CN99

※ : OPTIONAL

Power Supply Circuit - 3 of 5

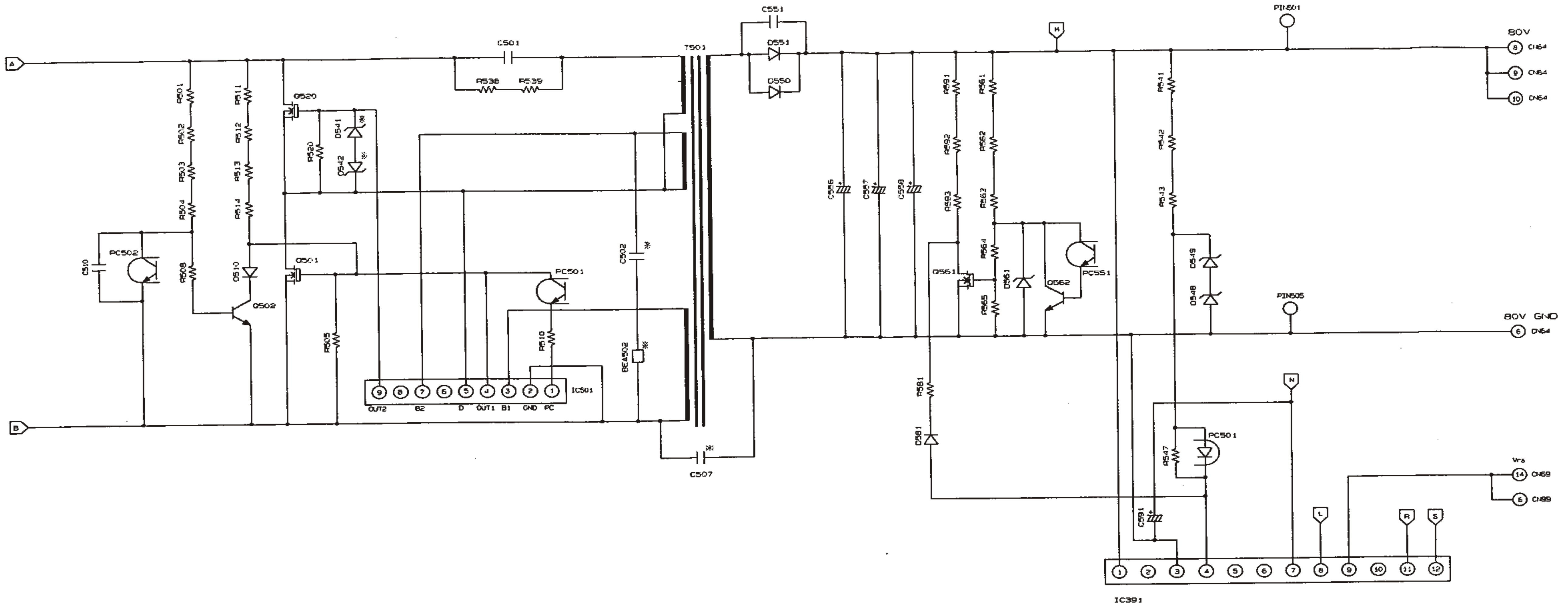
HITACHI


CN51
D020
D021
D004
RL002
C110
D010
D011
C091
C093
L001
L002
R004
R003
R005
Z001
C001
R001
C004
C005
D009
RL001
C008
D005
D006
C090
R013
R014
R015
D022
D023
D024
PC001
R010
C010
D007
D008
R012
C080
C092
C094
D001
D003
C006
C007
R020
R021
R022
R023
C011
L005
C015
D017
D018
D081
R081
R028
Q003
R033
D082
R082
R030
Q004
C012
C013
R031
R032
R024
R074
R025
R075
R026
R076
R027
R077
BEAD05
C016
R053
R054
R055
R056
R057
R048
R049
R050
R051
C040
R044
R043
Q005
R041
Q006
R091
R092
R093
R094
R095
R061
R062
R063
R064
X2
C024
C023
D019
PTC001
C025
Q010
R067
R066
R070
R068
PC004
C026
A
B
C
D
E
F
G
H
※:OPTIONAL

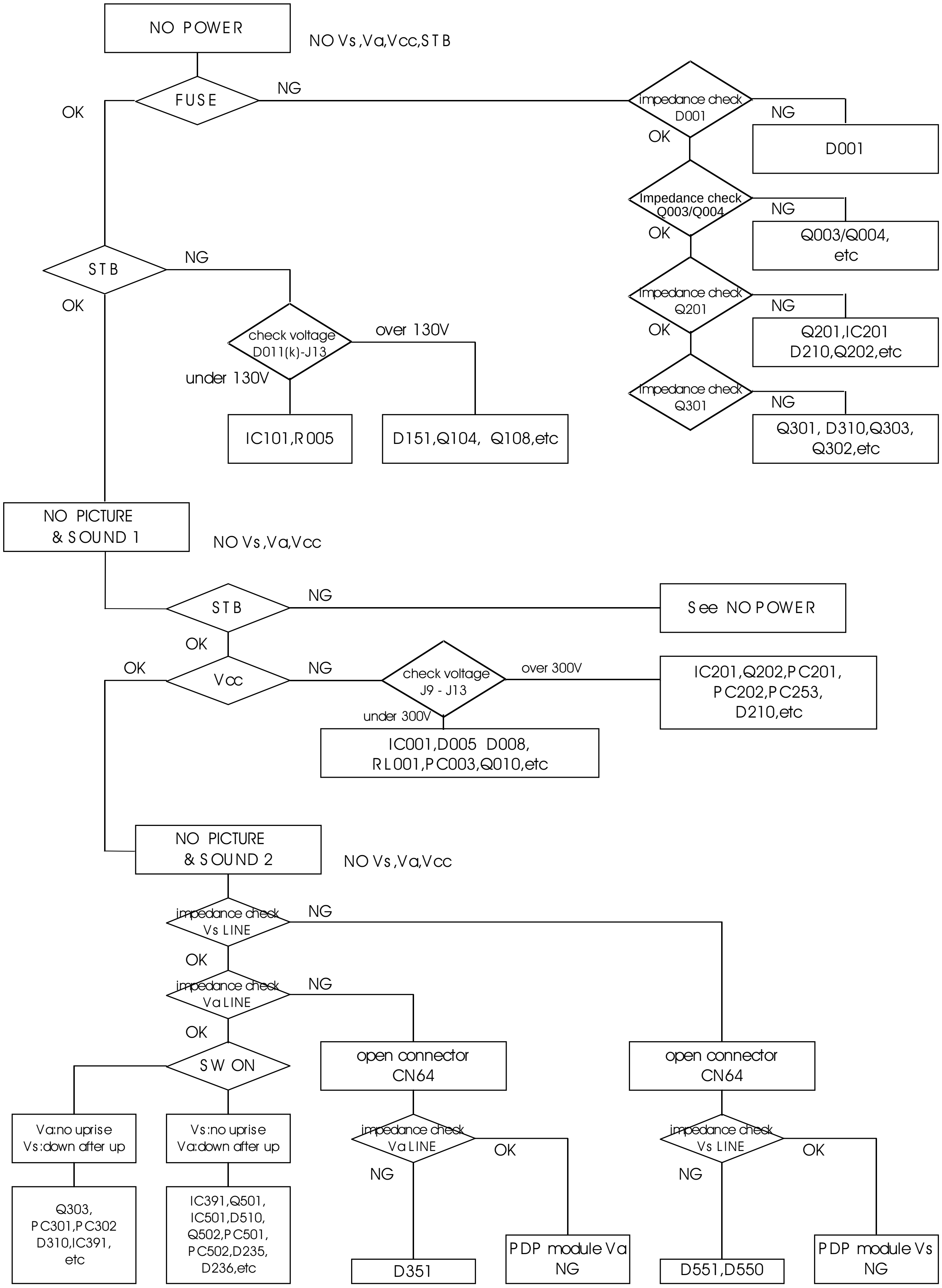
SM005

Power Supply Circuit - 4 of 5

HITACHI


A
B
R501
R502
R503
R504
R508
C510
PC502
R511
R512
R513
R514
D510
Q502
Q520
R520
D541
D542
Q501
R505
C501
R538
R539
T501
C502
BEA502
PC501
R510
IC501
9
8
7
6
5
4
3
2
1
OUT2
B2
D
OUT1
B1
GND
PC
C507
C551
D551
D550
C556
C557
C558
R591
R592
R593
R561
R562
R564
R565
Q561
D561
Q562
PC551
M
PIN501
R541
R542
R543
D549
D548
PIN505
80V
CN54
80V GND
N
R581
D581
R547
PC501
C591
L
R
S
Vrs
CN59
IC391
1
2
3
4
5
6
7
8
9
10
11
12

※ : OPTIONAL


NO POWER
NO Vs,Va,Vcc,STB
FUSE
NG
OK
impedance check D001
NG
D001
OK
Impedance check Q003/Q004
NG
Q003/Q004, etc
OK
Impedance check Q201
NG
Q201,IC201 D210,Q202,etc
OK
impedance check Q301
NG
Q301, D310,Q303, Q302,etc
STB
NG
OK
check voltage D011(k)-J13
over 130V
under 130V
IC101,R005
D151,Q104, Q108,etc
NO PICTURE & SOUND 1
NO Vs,Va,Vcc
STB
NG
See NO POWER
OK
Vcc
NG
OK
check voltage J9 - J13
over 300V
IC201,Q202,PC201, PC202,PC253, D210,etc
under 300V
IC001,D005 D008, RL001,PC003,Q010,etc
NO PICTURE & SOUND 2
NO Vs,Va,Vcc
impedance check Vs LINE
NG
OK
impedance check Va LINE
NG
OK
SW ON
Va:no uprise Vs:down after up
Vs:no uprise Va:down after up
Q303, PC301,PC302 D310,IC391, etc
IC391,Q501, IC501,D510, Q502,PC501, PC502,D235, D236,etc
open connector CN64
impedance check Va LINE
OK
NG
D351
PDP module Va NG
open connector CN64
impedance check Vs LINE
OK
NG
D551,D550
PDP module Vs NG

Vcc LINE is down, when Vs,Va LINE is down in MPF7409L.

Power Supply Unit Troubleshooting

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